NWL JANUARY 2014 FEDERAL PROJECT STATE PROJECT STATE OF WISCONSIN ORDER OF SHEETS PROJECT CONTRACT PROJECT WITH: WISC 2014009 8997-00-30 1 DEPARTMENT OF TRANSPORTATION Typical Sections and Details includes erosion control plans) Section No. Estimate of Quantities Section No. PLAN OF PROPOSED IMPROVEMENT Ä Right of Way Plat Plan and Profile CITY OF RICE LAKE, WEST AVENUE Section No. Standard Detail Drawings 9 Section No. Sign Plates 9 (AUGUSTA STREET - KNAPP STREET) Section No. Computer Earthwork Data Section No. Cross Sections LOCAL STREET 0 0 TOTAL SHEETS = 96 BARRON COUNTY PROJECT LOCATION STATE PROJECT NUMBER 8997-00-30 END PROJECT STA. 62+25 ACCEPTED FOR Y = 137,107.72X = 327.378.99CENEX DR DESIGN DESIGNATION 7-16-13 A.D.T. (2011) = 2440 A.D.T. (2033) = 3250D.H.V. = 423 Virector D.D. = 50/50T. (A.D.T.) = 2.8% DESIGN SPEED = 35 MPH T = 35 - N= 481,800 William Di SCONS BEGIN PROJECT PROFILE CONVENTIONAL SYMBOLS GRADE LINE STA. 35+29 PLAN CORPORATE LIMITS ORIGINAL GROUND Y = 134,412.86X = 327,308.63MARSH OR ROCK PROFILE PROPERTY LINE SCHARF (To be noted as such) SPECIAL DITCH E-37704 LIMITED HIGHWAY EASEMENT GRADE ELEVATION EXISTING RIGHT OF WAY ARRON PROPOSED OR NEW R/W LINE CULVERT (Profile View) UTILITIES SLOPE INTERCEPT ELECTRIC REFERENCE LINE FIBER OPTIC EXISTING CULVERT CITY PROPOSED CULVERT SANITARY SEWER (Box or Pipe) STATE OF WISCONSIN STORM SEWER COMBUSTIBLE FLUIDS DEPARTMENT OF TRANSPORTATION PREPARED BY WATER VALVE M MARSH AREA FIRE HYDRANT CE-Surveyor C.S. COOPER ENGINEERING WATER SERVICE CURB STOP WOODED OR SHRUB AREA KNIGHT E/A INC. UTILITY PEDESTAL POWER POLE di-TREE (WITH DIAMETER), TELEPHONE POLE Ø CONIFEROUS, DECIDUOUS LAYOUT (5) STORM SEWER MANHOLE d ATE: 7/31/13 SANITARY SEWER MANHOLE COORDINATE NOTE: (S) COORDINATES ON THIS PLAN ARE REFERENCED DETECTABLE WARNING FIELD 0 TOTAL NET LENGTH OF CENTERLINE = 0.511 MI TO THE WISCONSIN COUNTY COORDINATE SYSTEM E BARRON COUNTY. STORM SEWER INLET-SOUARE 圃 FILE NAME: G:\2011-proj\11115082\dwg\010101_ti.dwg PLOT DATE: Jul 08, 2013 - 04:19pm PLOT NAME: CEC-PLAN ORG. DATE: Dec 05, 2007 Originator : Originator PLOT SCALE: Half-Scale

UTILITIES

LIST OF STANDARD ABBREVIATIONS

LENGTH OF CURVE

4 D. I	A DAVIETO CEDATE		
ABUT AC	ABUTMENT ACRES	LT.	LEFT
AGG	AGGREGATE	LI. LS	LUMP SUM
AH	AHEAD	MH	MANHOLE
ADT	AVERAGE DAILY TRAFFIC	N	NORTH
		PAVT	PAVEMENT
AVG.	AVERAGE	PC	POINT OF CURVATURE
ASPH	ASPHALTIC	PE	PRIVATE ENTRANCE
BK.	BACK	PI	POINT OF INTERSECTION
BM	BENCHMARK	PL	PROPERTY LINE
	CENTRAL ANGLE OR DELTA	PP	POWER POLE
Δ		PT	POINT OF TANGENCY
© , C/L C & G	CENTERLINE CURB AND GUTTER	R	RANGE , RADIUS
CABC	CRUSHED AGGREGATE	RCCP	REINFORCED CONCRETE
Cribo	BASE COURSE		CULVERT PIPE
CONC.	CONCRETE	RD	ROAD
		REBAR	REINFORCEMENT BAR
COR	CORNER	REQD	REQUIRED
CORR	CORRUGATED	RDWY	ROADWAY
CSCP	CORRUGATED STEEL	RHF	RIGHT HAND FORWARD
	CULVERT PIPE	RL, R/L	REFERENCE LINE
CSPA	CORRUGATED STEEL	RR	RAILROAD
	PIPE ARCH	RT.	RIGHT
CTH	COUNTY TRUNK HIGHWAY	R/W, RO	W RIGHT-OF-WAY
CP.	CULVERT PIPE	S	SOUTH
CY	CUBIC YARD	SAN S	SANITARY SEWER
CWT. DIA	HUNDREDWEIGHT DIAMETER	SDD	STANDARD DETAIL DRAWING
DIA	DEGREE OF CURVE	SE	SUPER ELEVATION
DHV	DESIGN HOURLY VOLUME	SF.	SQUARE FEET
DWY	DRIVEWAY	SHLDR	SHOULDER
EBS	EXC. BELOW SUB GRADE	SPECS SQ.	SPECIFICATIONS SQUARE
	ELEVATION	SS.	STORM SEWER
ELEC.	ELECTRIC	SY.	SQUARE YARD
EXC	EXCAVATION	STH	STATE TRUNK HIGHWAY
EXIST	EXISTING	ST.	STREET
E	EAST	STA.	STATION
FE	FIELD ENTRANCE	SW	SIDEWALK
FF.	FACE TO FACE	T TC	TANGENT TOP OF CURP
FL, F/L	FLOW LINE	T, T/L	TOP OF CURB TRANSIT LINE
G	GARAGE		
GN	GRID NORTH	TEL TEMP	TELEPHONE TEMPORARY
Н	HOUSE	TLE	TEMPORARY LIMITED EASEMENT
		TYP	TYPICAL
HYD	HYDRANT	USH	UNITED STATES HIGHWAY
I	INTERSECTION ANGLE	UG	UNDERGROUND
INTERS	INTERSECTION	V	DESIGN SPEED
INV.	INVERT	VAR.	VARIABLE
IP	IRON PIN OR PIPE	VERT	VERTICAL
LC	LONG CHORD OF CURVE	YD	YARD
LF	LINEAR FOOT		
LHF	LEFT HAND FORWARD		

ELECTRIC BARRON ELECTRIC ATTN.: JEFF NELSON BARRON, WI 54812 TEL.: EMAIL:

NATURAL GAS WE ENERGIES ATTN.: TOM KROSTAG

1921 8TH ST S

TEL.: 715-421-7268

EMERGENCY TEL.:

EMAIL: thomas.krostag@

GAS: 800-261-5325

WISCONSIN RAPIDS, WI 54494

ELECTRIC: 800-662-4797

ELECTRIC RICE LAKE UTILITIES ATTN.: LEO DIEHL 320 W. COLEMAN RICE LAKE, WI 54868 TEL.: 715-234-7004 EMAIL: leod@ricelakeutilities.com

CABLE TELEVISION CHARTER COMMUNICATIONS ATTN.: TOM HAASE 2304 S. MAIN ST. RICE LAKE, WI 54868 TEL.: 715-236-5005 EMAIL: thomas.haase@chartercom.com

TELEPHONE CENTURYLINK ATTN.: REED LECHNIR 20 SOUTH WILSON RICE LAKE, WI 54868 TEL.: 715-234-5526 EMAIL: FAX.: 715-234-1483

TELEPHONE MOSAIC TELECOM ATTN.: DENNIS RUSSETT 401 S. 1ST ST., P.O. BOX 664 CAMERON, WI 54822 TEL.: 1-715-458-5321 EMAIL: ctcdennis@mosaictelecom.net **GENERAL NOTES:**

NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED, FERTILIZED AND SEEDED, AND EROSION MAT SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

THE EXACT CONSTRUCTION LIMITS OF PRIVATE ENTRANCES SHALL BE COORDINATED WITH THE ENGINEER IN THE FIELD

PLAN SHEETS SHOW EXISTING UTILITIES THAT ARE WITHIN THE LIMITS OF THE PROPOSED CONSTRUCTION. THERE MAY BE UTILITIES WITHIN THE RIGHT OF WAY THAT ARE NOT SHOWN ON THE PLANS.

ASPHALTIC SURFACE FOR AUGUSTA STREET SHALL BE 4" MIN. OR MATCH EXISTING

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES SHALL BE 3" MIN. OR MATCH EXISTING WHICHEVER IS GREATER

PLACE 4 INCHES OF INSULATION BOARD POLYSTYRENE 2-INCH AT THE LOCATIONS THE PLANS SHOW. TYPICAL INSTALLATION CONSISTS OF (2) 4-FT X 8-FT SHEETS (STACKED ON TOP OF EACH OTHER) PLACED IN THE STORM SEWER TRENCH UNDERNEATH THE STORM SEWER PIPE AT THE WATERMAIN CROSSINGS ORIENTATED WITH THE LONG DIRECTION MATCHING THE STORM SEWER PIPE.



EMAIL: wallyt@ricelakeutilities.com

WATER & SANITARY SEWER RICE LAKE UTILITIES ATTN.: WALLY THOM 320 W. COLEMAN RICE LAKE, WI 54868 TEL.: 715-234-7004

Toll Free (800) 242-8511 Hearing Impaired TDD (800) 542-2289 www.DiggersHotline.com

> 2040 W. WISCONSIN AVE. SUITE 10 MILWAUKEE, WI 53233

** NOT A MEMBER OF DIGGERS HOTLINE.

OTHER CONTACTS

D.N.R. ENVIRONMENTAL REVIEW COORDINATOR Bill Gantz

810 W. MAPLE ST. SPOONER, WI 54801 TEL.: 715-635-4071

PLOT BY: Owner

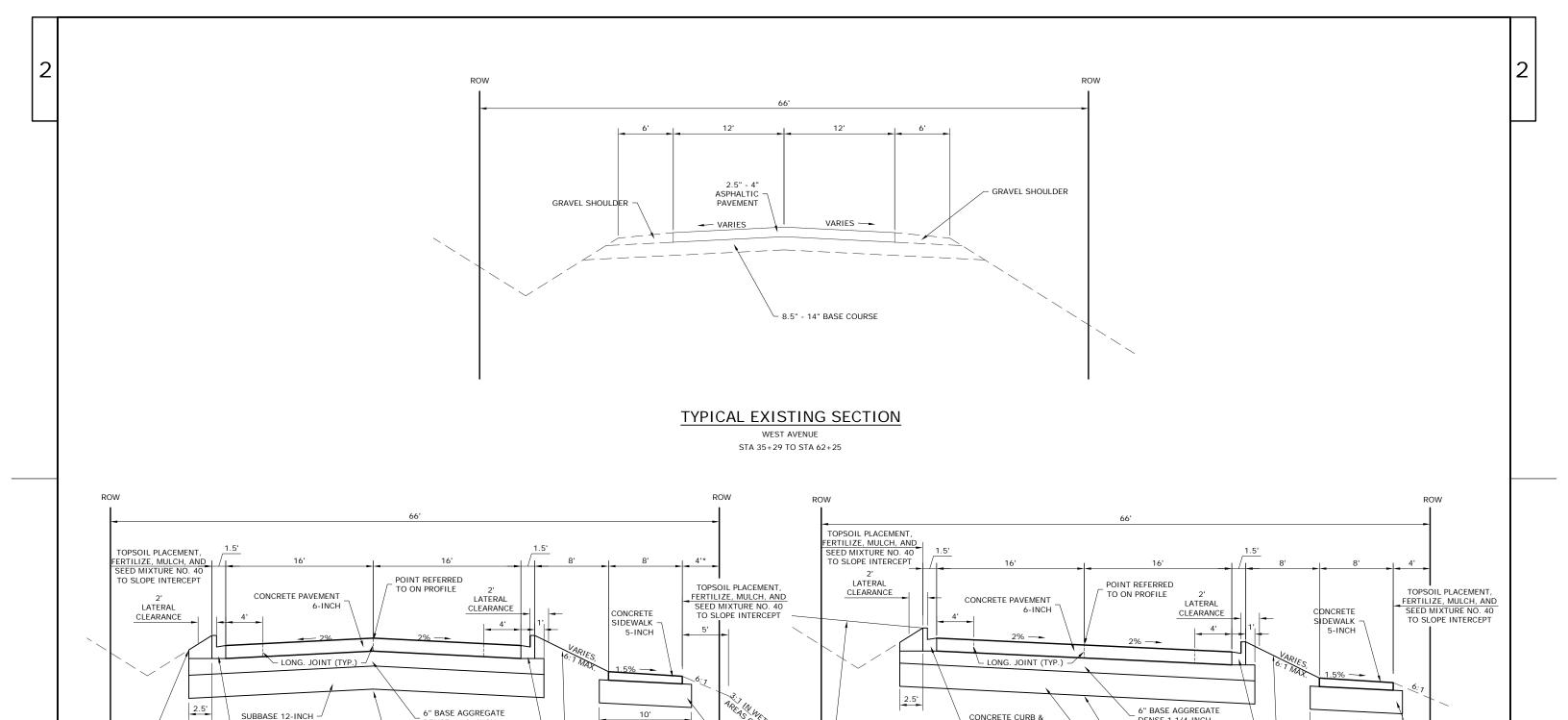
EMAIL: william.gantz@wisconsin.gov

STORM SEWER RICE LAKE STREET DEPT. ATTN.: JIM ANDERSON 326 S. MAIN STREET RICE LAKE, WI 54868 TEL.: 715-234-7402 EMAIL: janderson@ricelakegov.org DESIGN CONSULTANT

2600 COLLEGE DRIVE, P.O.B. 230 RICE LAKE, WISCONSIN 54868-0230 TELEPHONE (715) 234-7008 FAX (715) 234-1025

Originator:

PROJECT NUMBER: 8997-00-30 HWY: LOCAL STREET COUNTY: BARRON **GENERAL NOTES** SHEET NO: Ε PLOT NAME: GEN-NOTES PLOT DATE: Nov 04, 2013 - 11:26am PLOT SCALE : NONE FILE NAME: G:\2011-proj\11115082\dwg\020101_gn.DWG ORG. DATE: Oct 18, 1999



WEST AVENUE TYPICAL SECTION SHEET PROJECT NUMBER: 8997-00-30 HWY: LOCAL STREET COUNTY: BARRON SHEET NO: PLOT NAME: Layout1 FILE NAME: G:\2011-proj\11115082\dwg\020301_ts.dwg PLOT DATE: Jul 25, 2013 - 03:19pm PLOT BY: Owner ORG. DATE: Oct 18, 1999 Originator : J.C.A. PLOT SCALE : WISDOT/CADDS SHEET 42

8" SALVAGED BASE

AGGREGATE DENSE

DENSE 1 1/4-INCH

POINT REFERRED TO

ON CROSS SECTIONS

TYPICAL FINISHED SECTION

WEST AVENUE

STA 35+29 TO STA 47+44 STA 57+41 TO STA 62+25

EXCAVATION LIMIT

SHOWN ON CROSS

SECTIONS (TYP.)

CONCRETE CURB &

TOPSOIL PLACEMENT, FERTILIZE, MULCH, AND

SEED MIXTURE NO. 40

GUTTER 18-INCH TYPE A

*THIS DISTANCE VARIES FROM 1' - 4' FROM STA 36+29 - STA 46+37

CONCRETE CURB &

DENSE 1 1/4-INCH

TOPSOIL PLACEMENT, - FERTILIZE, MULCH, AND

SEED MIXTURE NO. 40

_ CONCRETE CURB & GUTTER 18-INCH TYPE A

8" SALVAGED BASE

AGGREGATE DENSE

SCALE

POINT REFERRED TO

ON CROSS SECTIONS

SUBBASE 12-INCH

TYPICAL FINISHED SECTION

WEST AVENUE

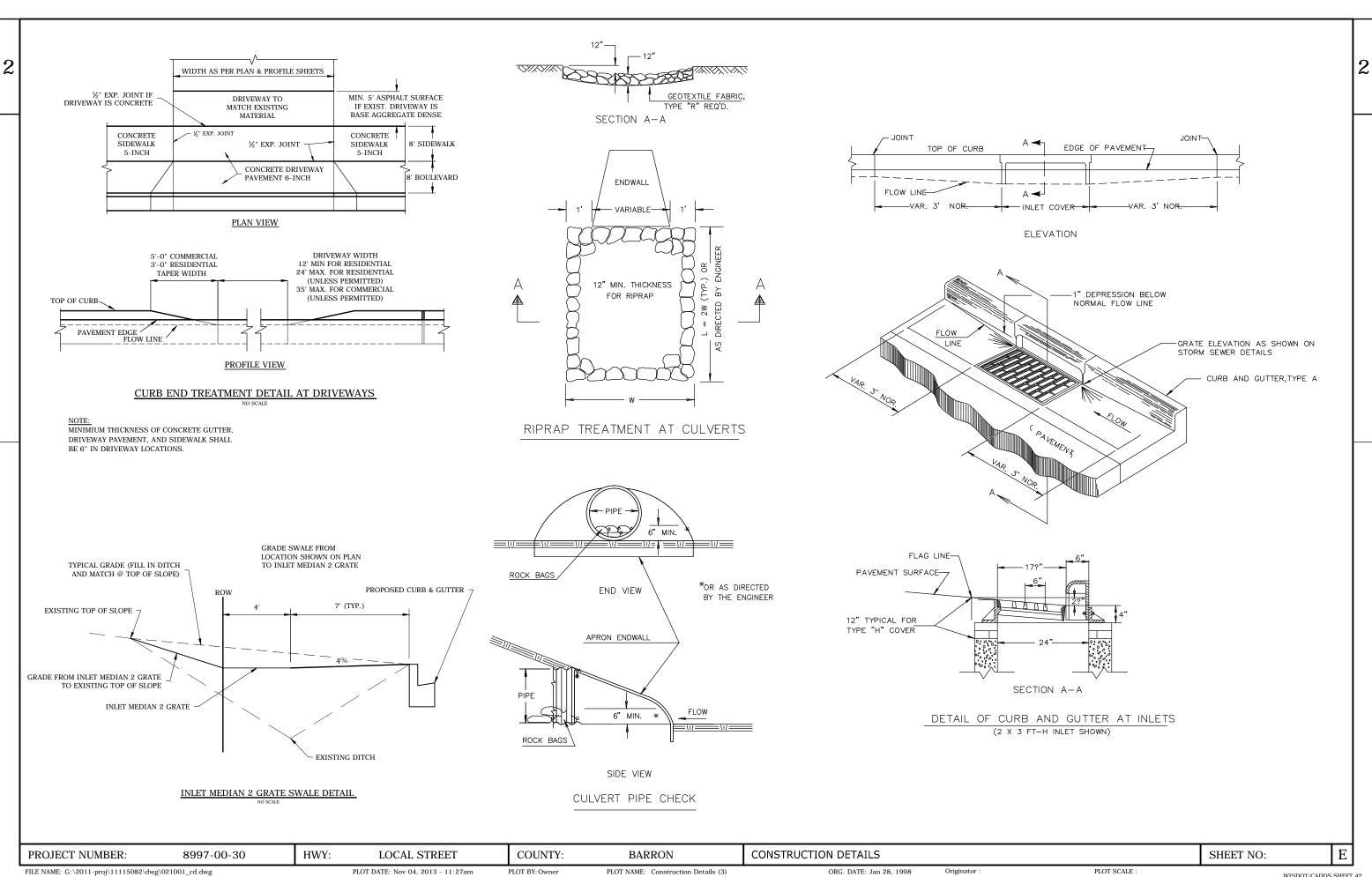
STA 47+44 TO STA 57+41

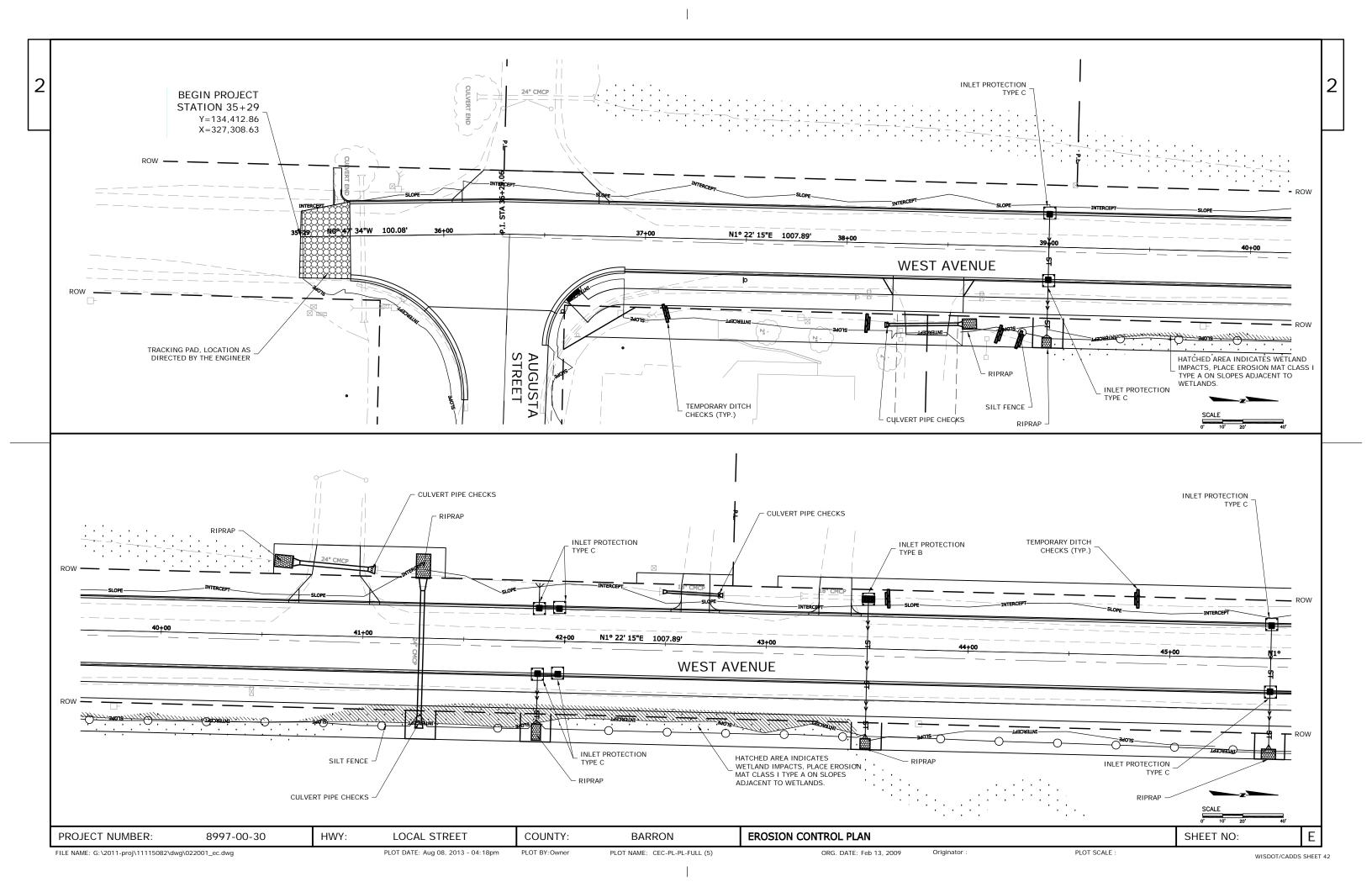
GUTTER 18-INCH TYPE A

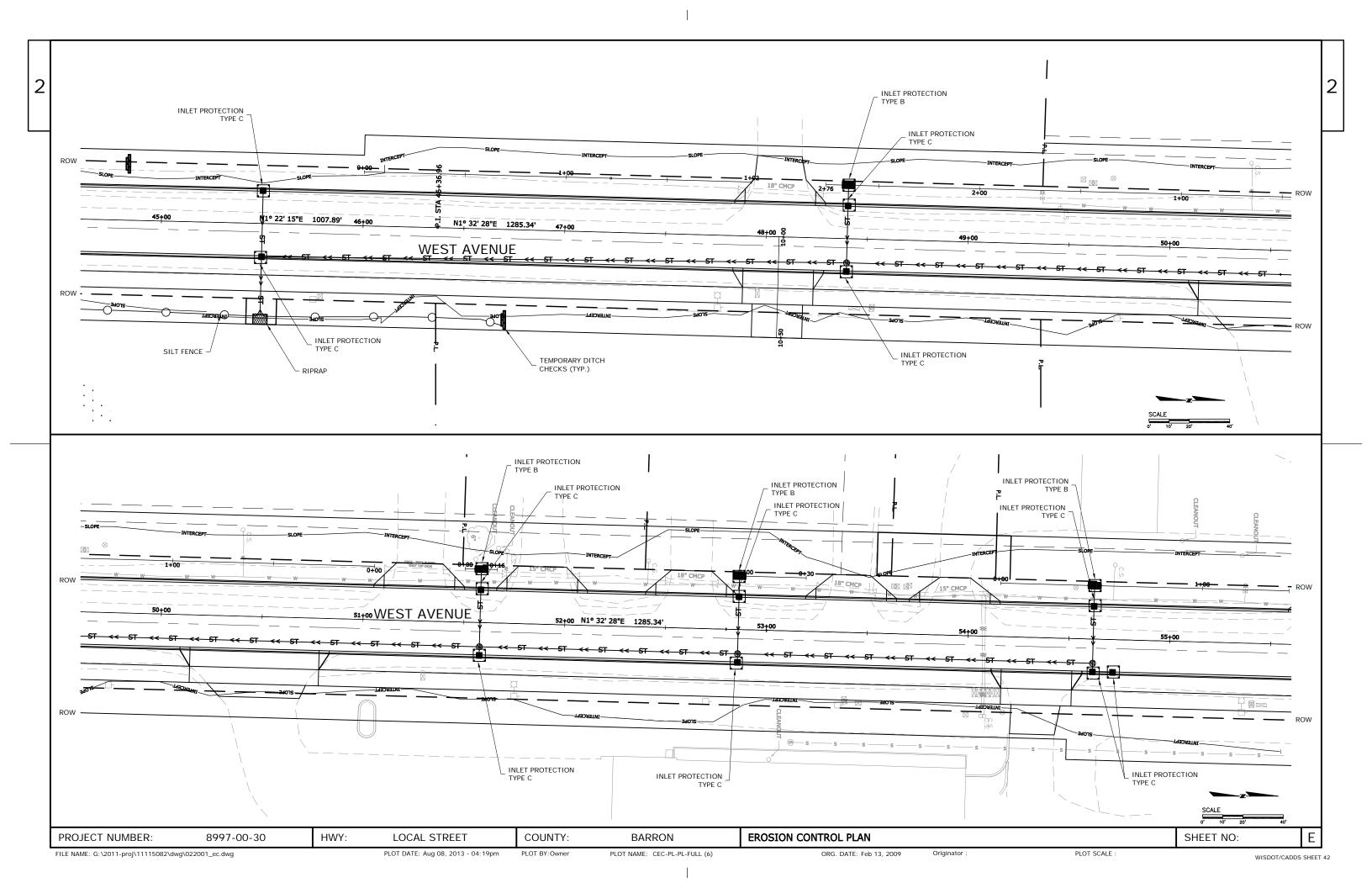
STA 46+55 - STA 59+76

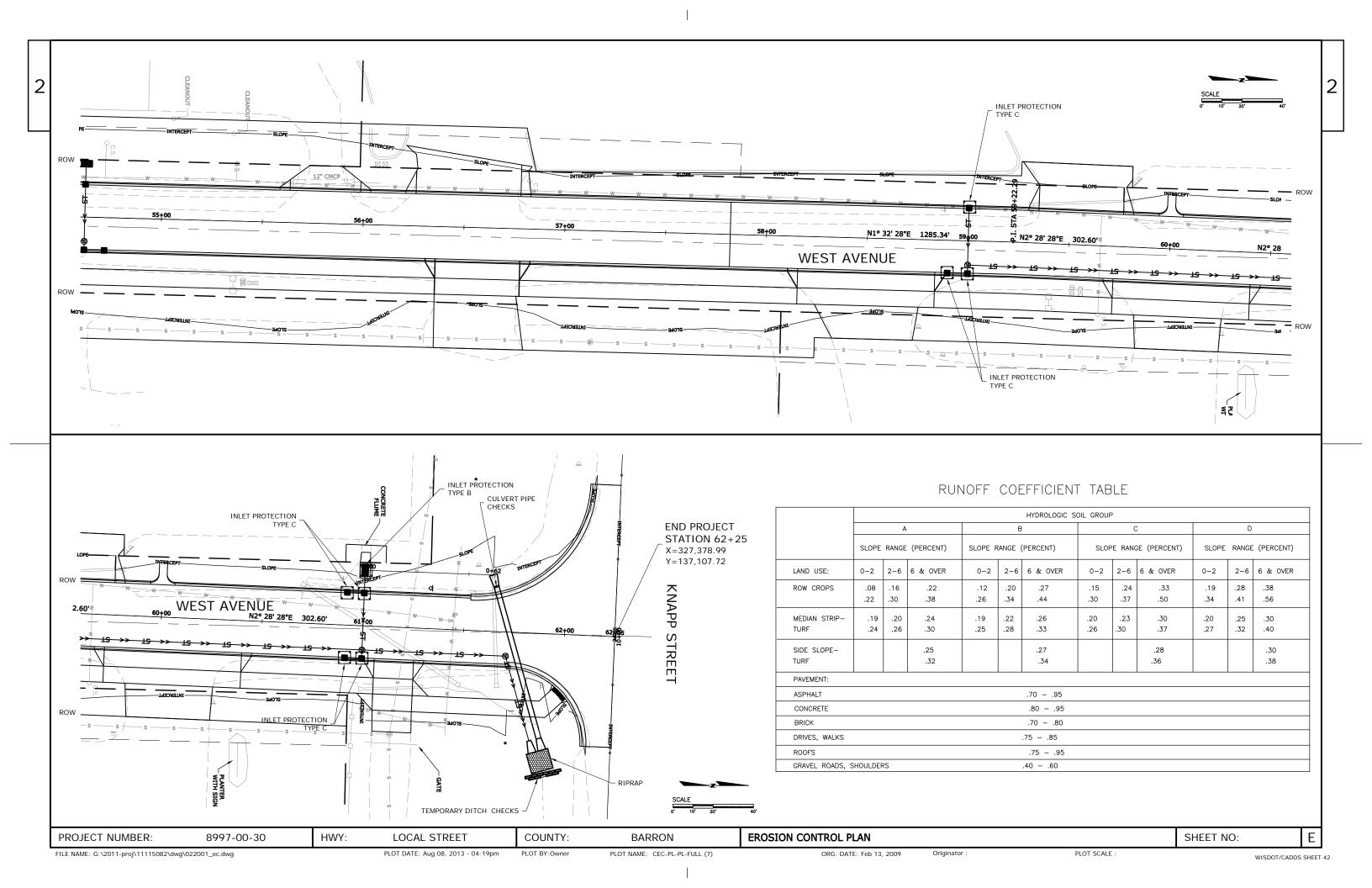
MATCH AT TOP OF SLOPE

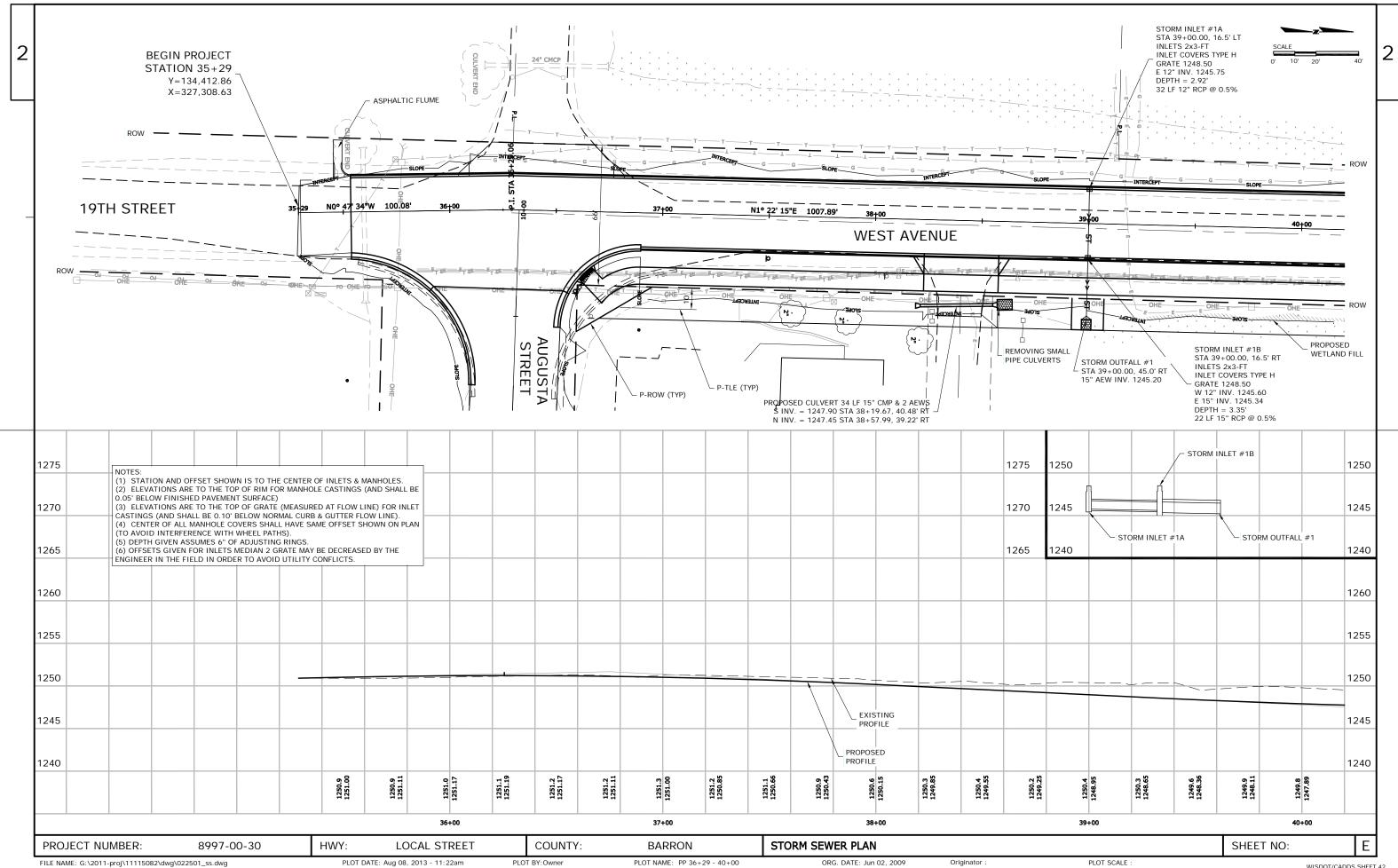
FILL IN EXISTING DITCH &

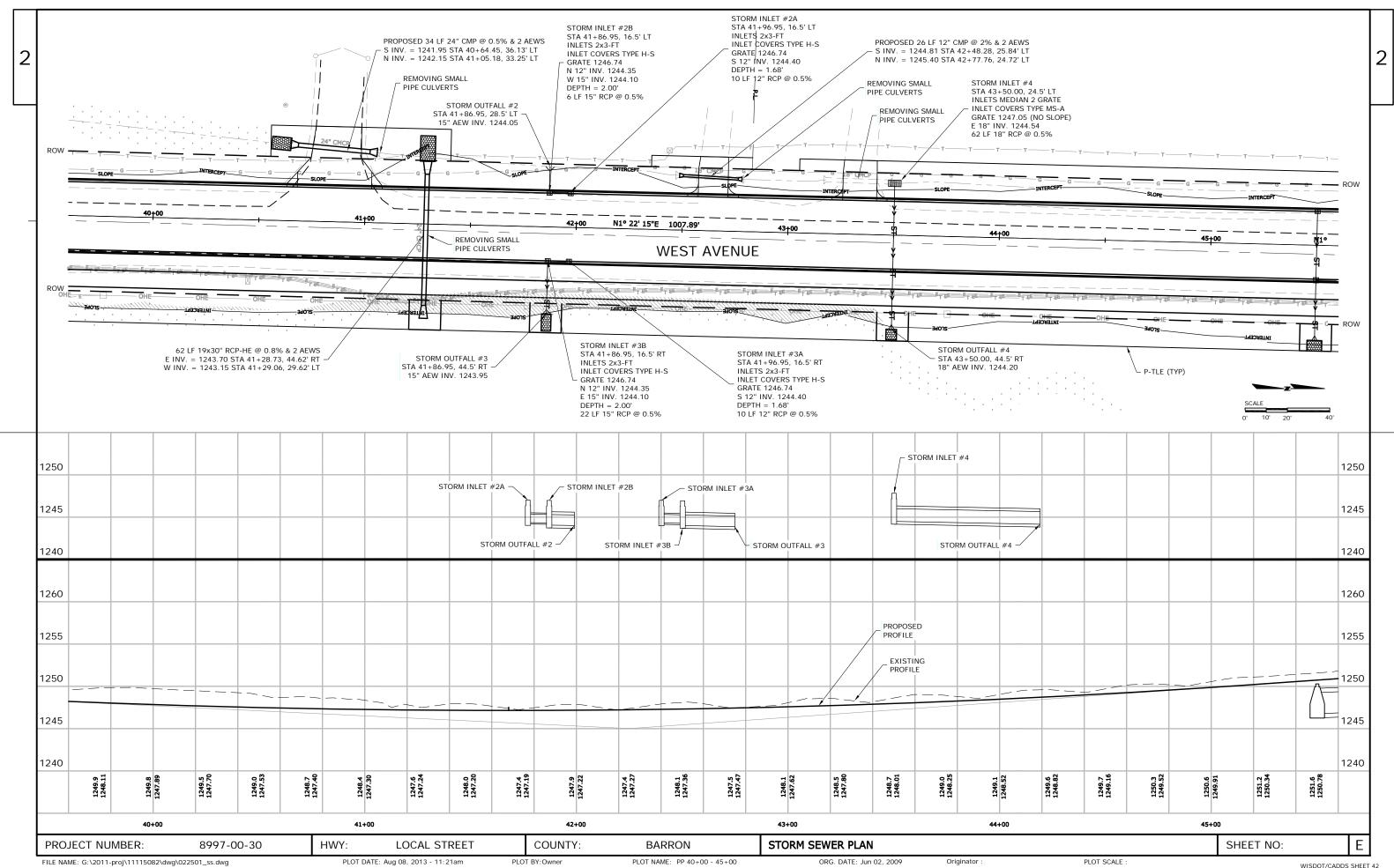


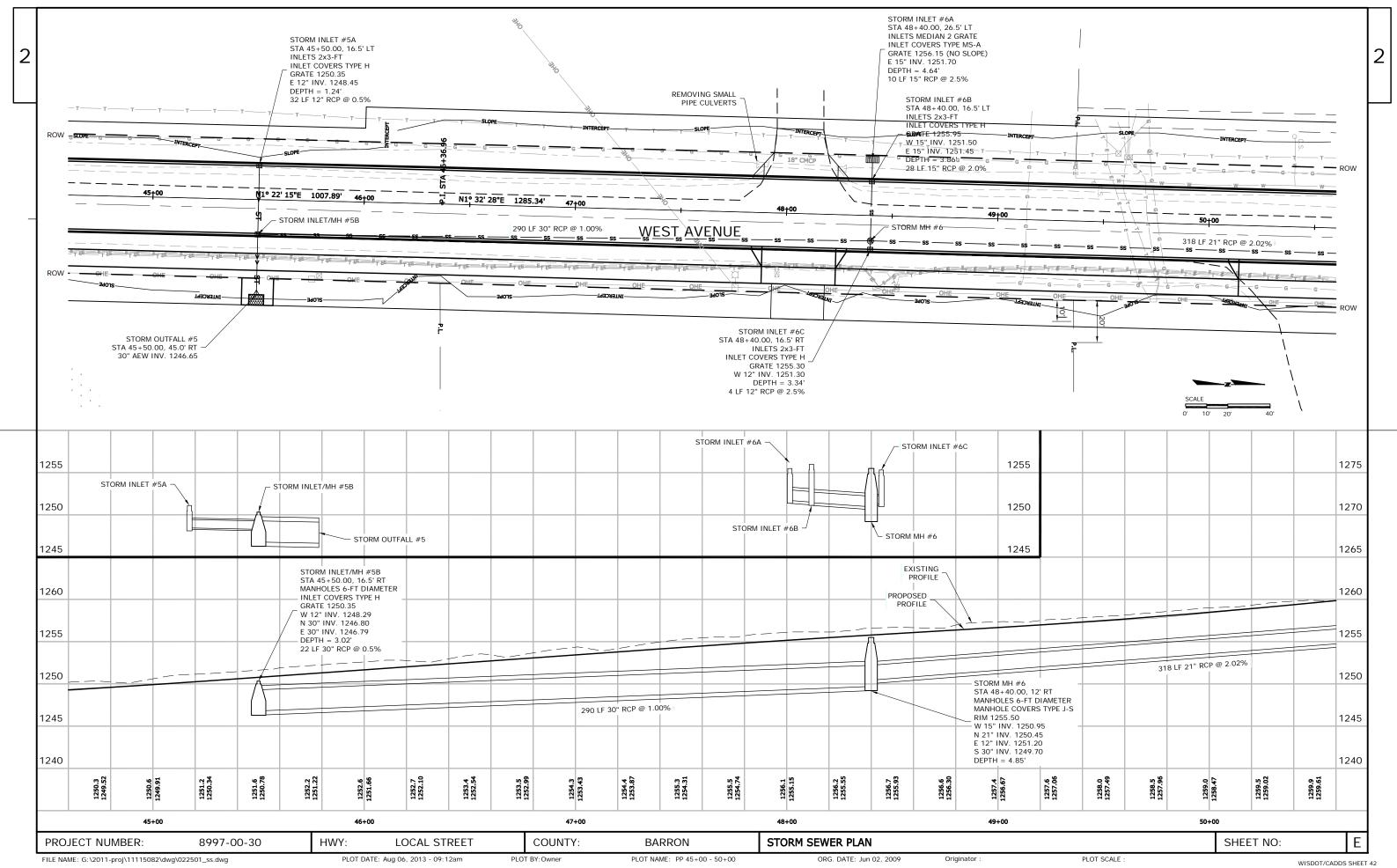


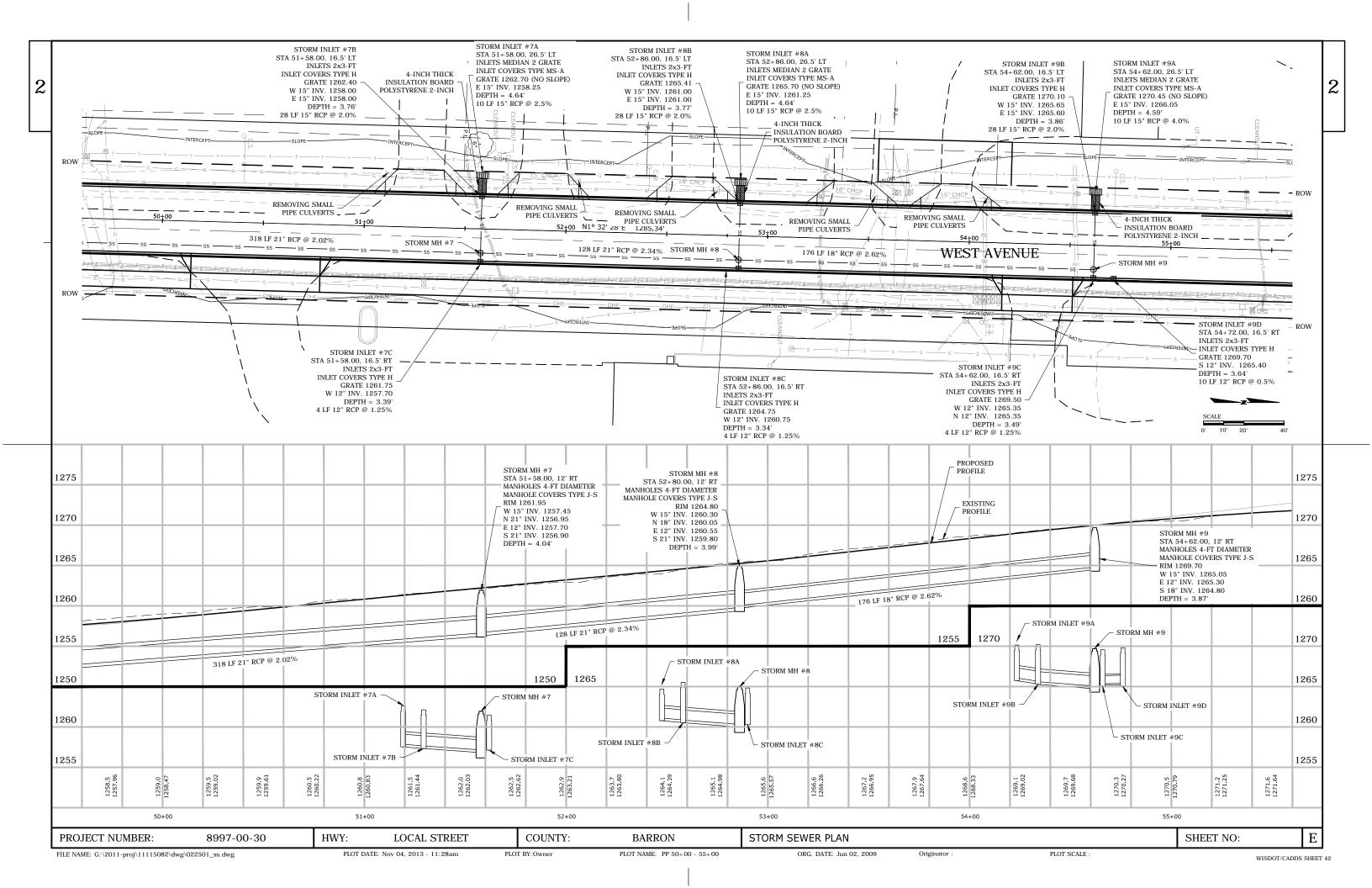


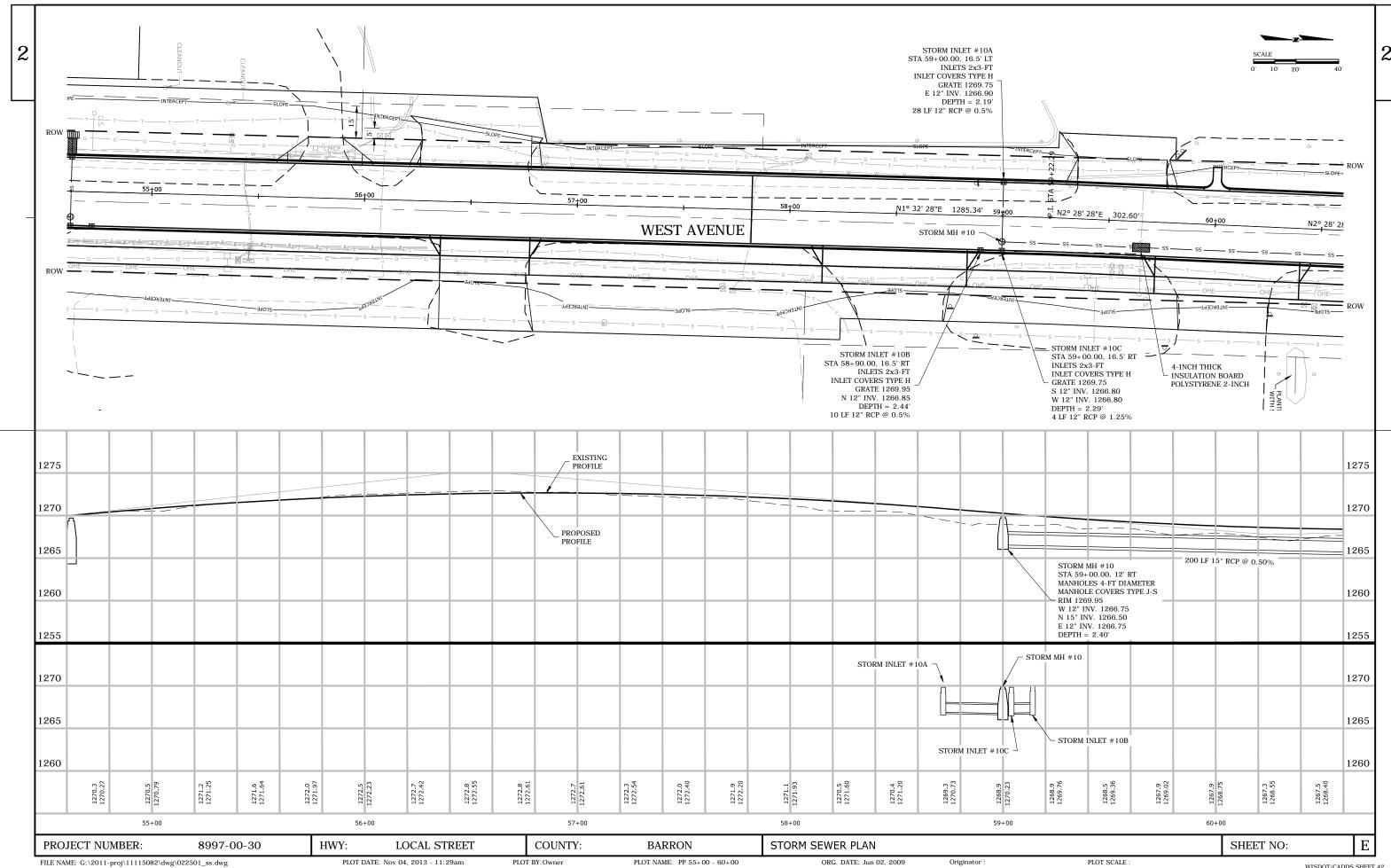


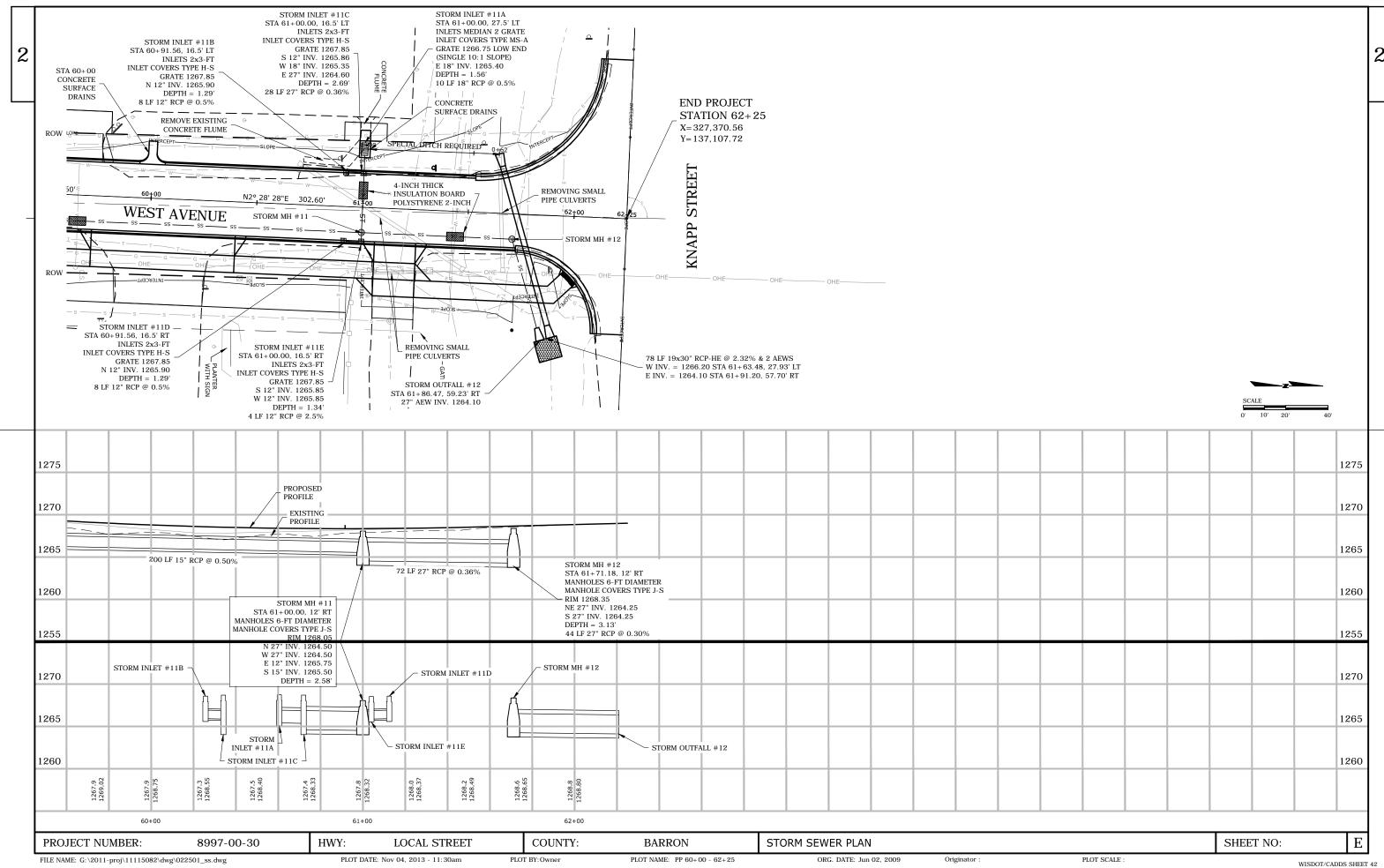


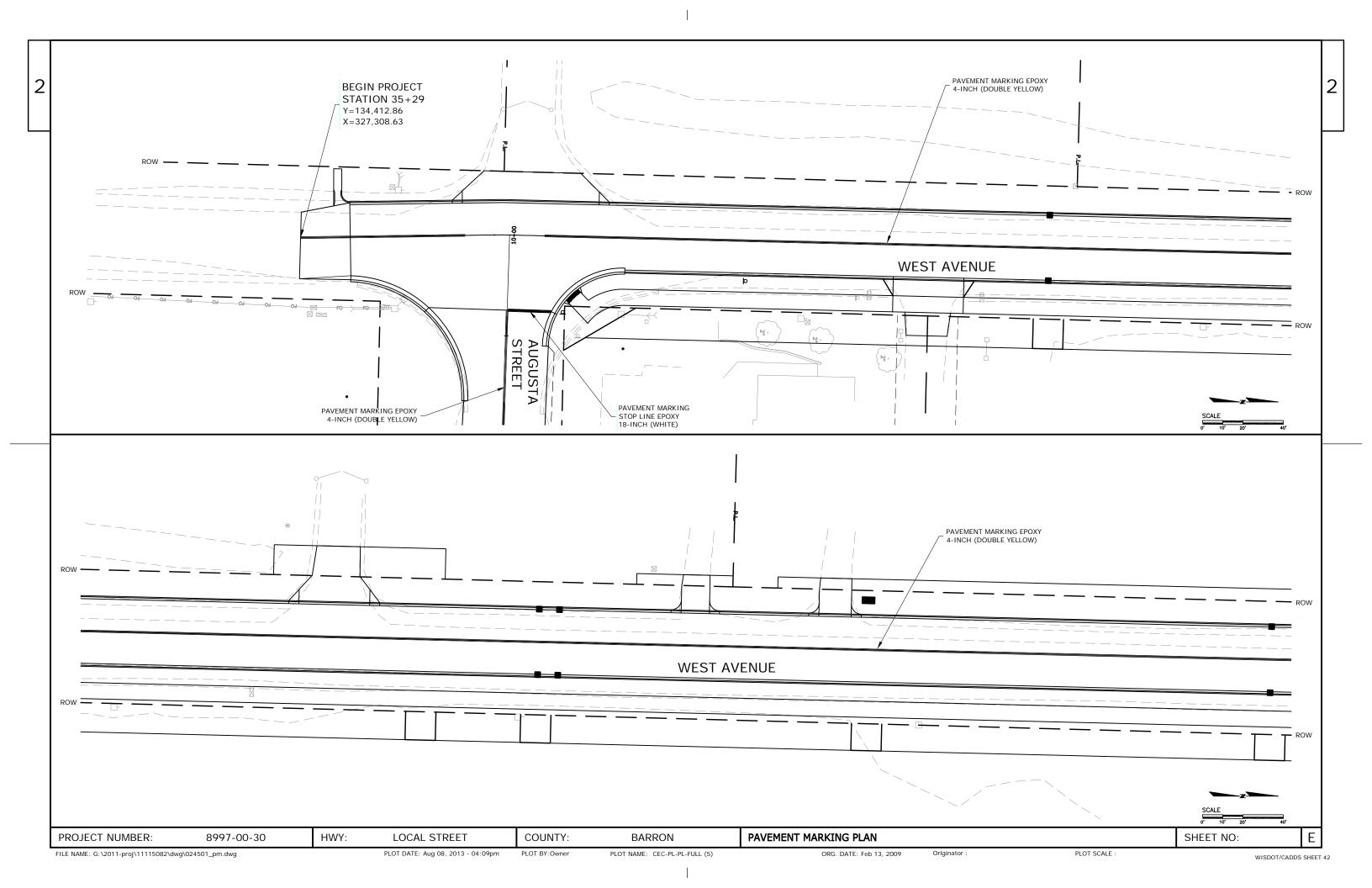


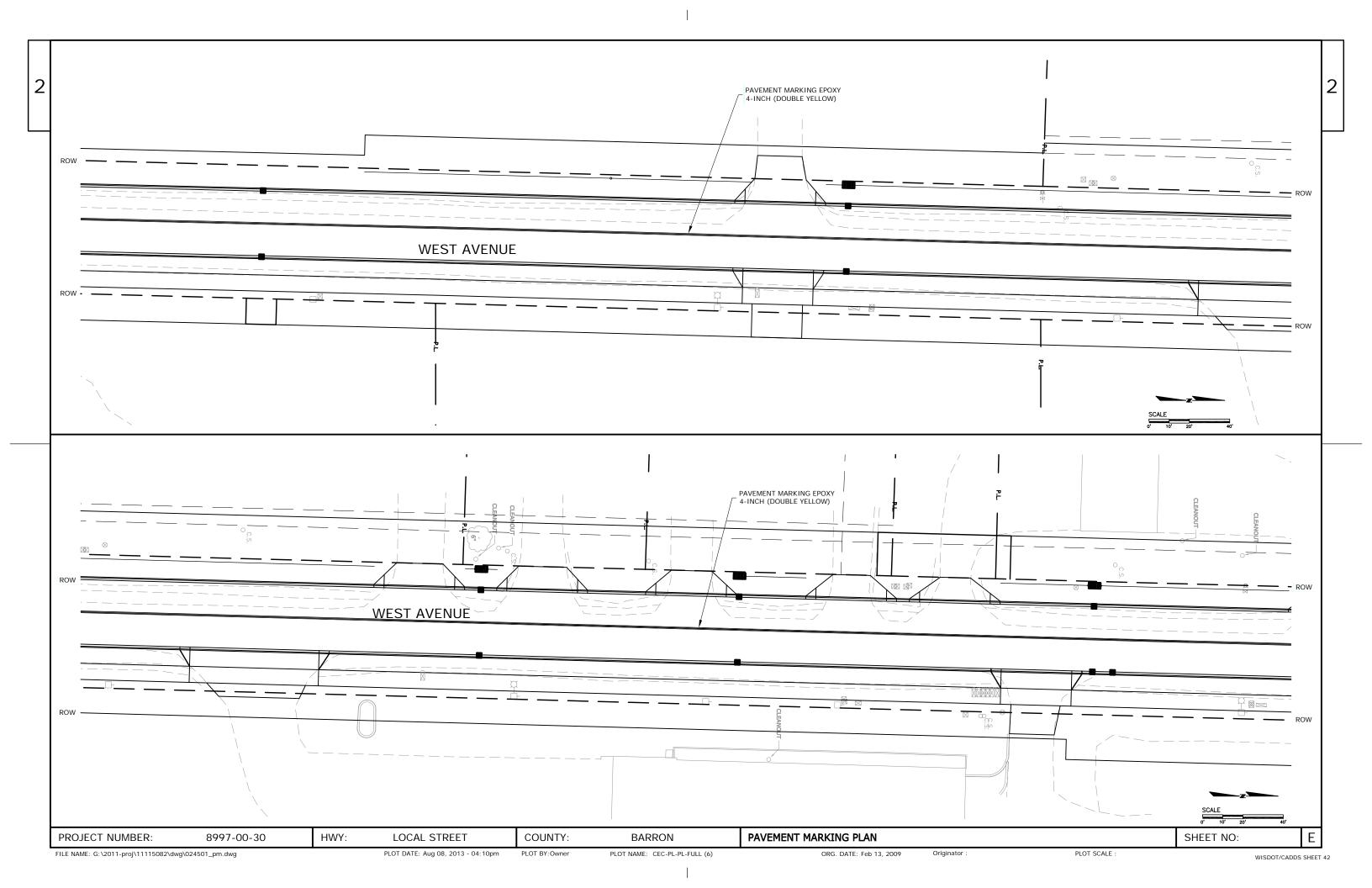


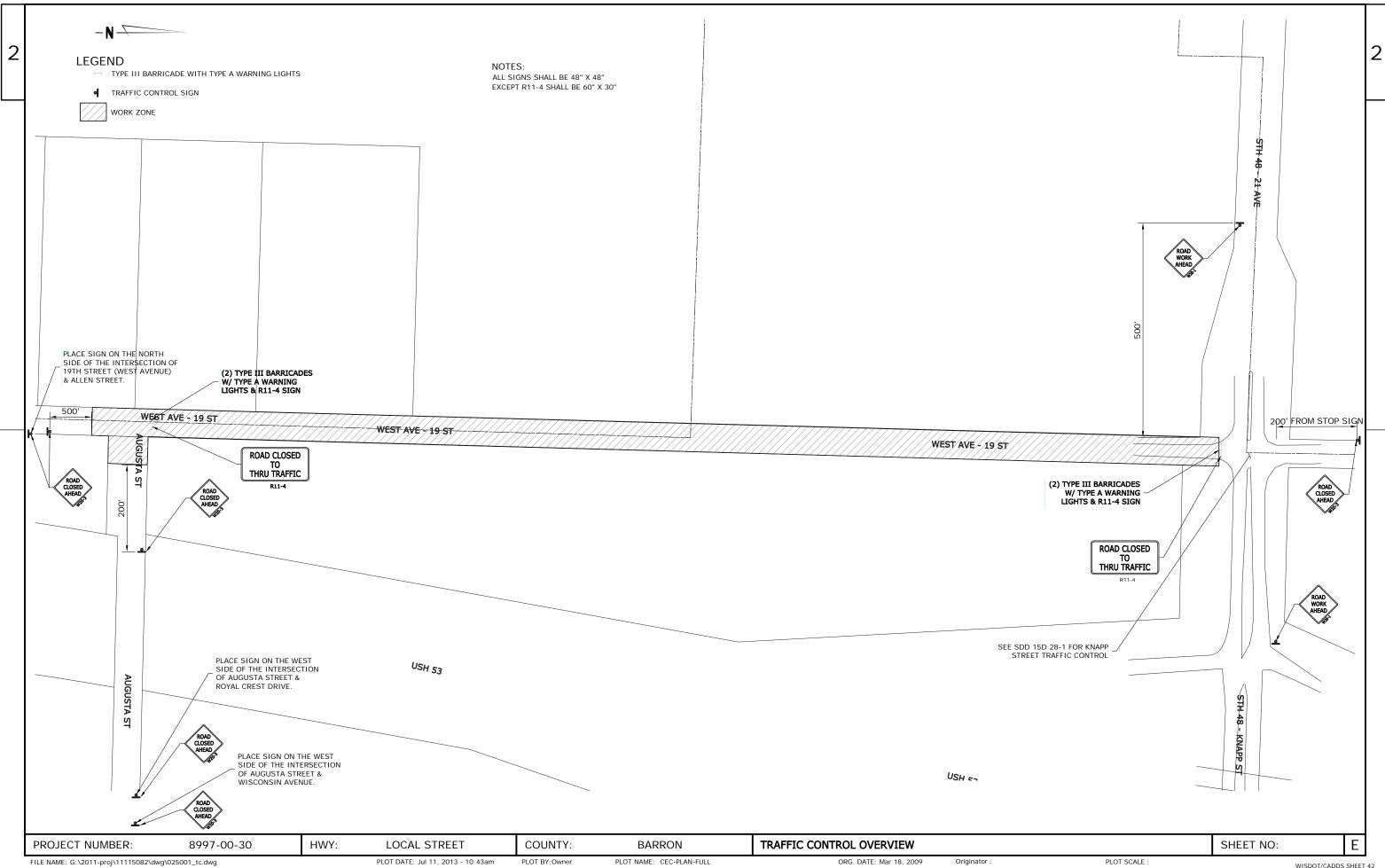


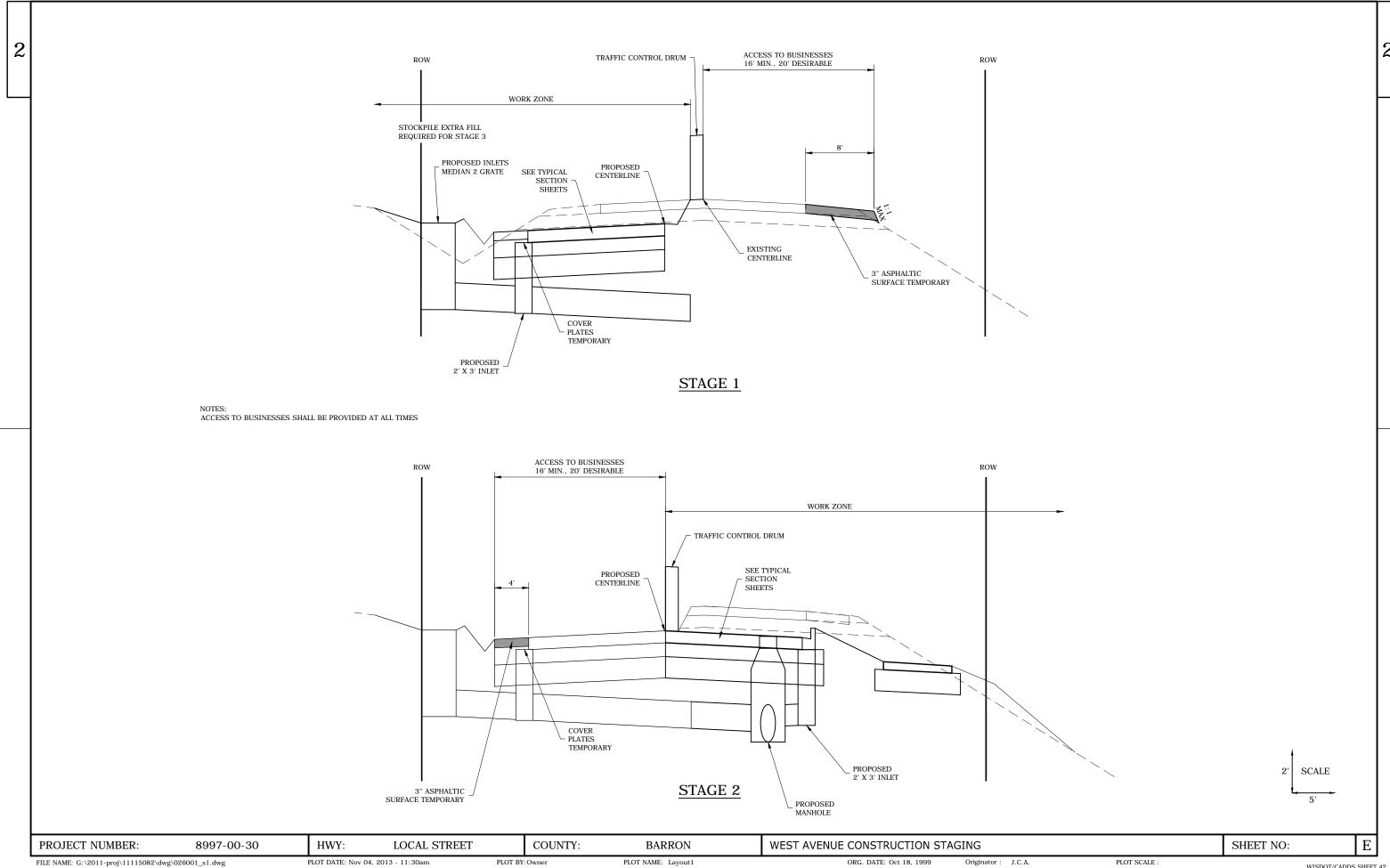




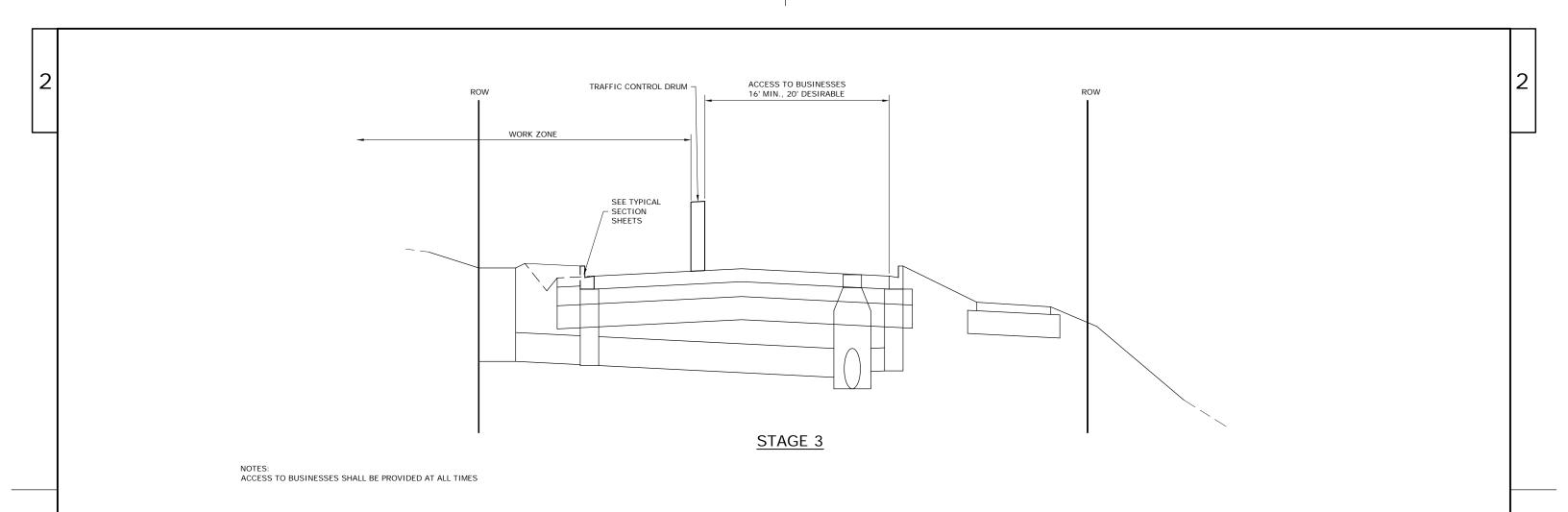








FILE NAME: G:\2011-proj\11115082\dwg\026001_s1.dwg WISDOT/CADDS SHEET 42



SCALE 5'

PROJECT NUMBER: 8997-00-30 HWY: LOCAL STREET COUNTY: BARRON WEST AVENUE CONSTRUCTION STAGING SHEET NO: FILE NAME: G:\2011-proj\11115082\dwg\026001_s1.dwg PLOT DATE: Jul 26, 2013 - 02:49pm PLOT BY: Owner PLOT NAME: Layout1 (2) ORG. DATE: Oct 18, 1999 Originator : J.C.A. PLOT SCALE : WISDOT/CADDS SHEET 42

DATE 05	NOV13	E S	TIMAT	E O F Q U A N	
LI NE NUMBER	ITEM	ITEM DESCRIPTION	UNI T	TOTAL	8997-00-30 QUANTI TY
0010	203. 0100	REMOVING SMALL PIPE CULVERTS	EACH	16.000	16.000
0020	204. 0100 204. 0150	REMOVING PAVEMENT REMOVING CURB & GUTTER	SY LF	15. 000 330. 000	15. 000 330. 000
0030 0040	204. 0150	EXCAVATION COMMON	CY	11, 040. 000	11, 040. 000
0050	205. 0400	EXCAVATION MARSH	CY	200. 000	200. 000
0060	213. 0100	FINISHING ROADWAY (PROJECT) 01.	EACH	1. 000	1. 000
0070	305. 0120	8997-00-30 BASE AGGREGATE DENSE 1 1/4-INCH	TON	3, 800. 000	3, 800. 000
0080	350. 0145	SUBBASE 12-I NCH	SY	12, 300. 000	12, 300. 000
0090	415.0060	CONCRETE PAVEMENT 6-INCH	SY	9, 950. 000	9, 950. 000
0100	415. 0210	CONCRETE PAVEMENT GAPS	EACH	10. 000	10. 000
0110	416. 0160	CONCRETE DRIVEWAY 6-INCH	SY	630. 000	630. 000
0120	416. 0260	CONCRETE DRIVEWAY HES 6-INCH	SY	200.000	200.000
0130	416. 0610	DRILLED TIE BARS	EACH	51. 000	51. 000
0140	416. 1010	CONCRETE SURFACE DRAINS	CY	2.500	2. 500
0150	465. 0105	ASPHALTI C SURFACE	TON	70. 000	70. 000
0160	465. 0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	220. 000	220. 000
0170	465. 0125	ASPHALTIC SURFACE TEMPORARY	TON	1, 000. 000	1, 000. 000
0180	465. 0310	ASPHALTIC CURB	LF CV	30.000	30.000
0190	465. 0315 521. 0112	ASPHALTIC FLUMES CULVERT PIPE CORRUGATED STEEL 12-INCH	SY LF	20.000	20. 000 26. 000
0200	521. 0112	COLVERT FIFE CORROGATED STEEL 12-INCH	∟ Γ	26. 000	20.000
0210	521. 0115	CULVERT PIPE CORRUGATED STEEL 15-INCH	LF LF	34.000	34.000
0220 0230	521. 0124 521. 1012	CULVERT PIPE CORRUGATED STEEL 24-INCH APRON ENDWALLS FOR CULVERT PIPE STEEL	LF EACH	34. 000 2. 000	34. 000 2. 000
0230	JZ 1. 101Z	12-INCH	LACII	2.000	2.000
0240	521. 1015	APRON ENDWALLS FOR CULVERT PIPE STEEL 15-INCH	EACH	2. 000	2. 000
0250	521. 1024	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH	EACH	2. 000	2. 000
00/0	F00 1015		FACU		
0260	522. 1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	3. 000	3. 000
0270	522. 1018	APRON ENDWALLS FOR CULVERT PIPE	EACH	1.000	1. 000
0280	522. 1027	REINFORCED CONCRETE 18-INCH APRON ENDWALLS FOR CULVERT PIPE	EACH	1. 000	1. 000
2200	322.1027	REINFORCED CONCRETE 27-INCH	_,.511	1. 000	
0290	522. 1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	1. 000	1. 000
0300	523. 0419	CULVERT PIPE REINFORCED CONCRETE	LF	140. 000	140. 000
3000	320.0417	HORI ZONTAL ELLI PTI CAL CLASS HE-I V		140.000	. 15. 555
		19X30-I NCH			
0310	523. 0519	APRON ENDWALLS FOR CULVERT PIPE	EACH	4. 000	4. 000
-		REINFORCED CONCRETE HORIZONTAL	-		
0220	601 040E	ELLIPTICAL 19X30-INCH	1 5	E 000 000	E 000 000
0320 0330	601. 0405 601. 0555	CONCRETE CURB & GUTTER 18-INCH TYPE A CONCRETE CURB AND GUTTER 6-INCH SLOPED	LF LF	5, 080. 000 230. 000	5, 080. 000 230. 000
0330	001.0000	36-INCH TYPE A	LI	230.000	230.000
0340	601. 0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED	LF	70. 000	70. 000
0350	602. 0410	36-INCH TYPE D CONCRETE SIDEWALK 5-INCH	SF	13, 900. 000	13, 900. 000
				13, 700. 000	13, 700. 000
0360	602. 0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	32. 000	32. 000
0370	606. 0200	RI PRAP MEDI UM	CY	22. 000	22. 000
0380	608. 0412	STORM SEWER PIPE REINFORCED CONCRETE	LF	172. 000	172. 000
		CLASS IV 12-INCH			
0390	608. 0415	STORM SEWER PIPE REINFORCED CONCRETE	LF	402. 000	402. 000
		CLASS IV 15-INCH			

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LINE					8997-00-30	
NUMBER	ITEM	ITEM DESCRIPTION	UNI T	TOTAL	QUANTI TY	
0880	650. 4500	CONSTRUCTION STAKING SUBGRADE	LF	2, 700. 000	2, 700. 000	
0890	650. 5500	CONSTRUCTION STAKING CURB GUTTER AND	LF	5, 380. 000	5, 380. 000	
		CURB & GUTTER				
0900	650. 6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	5. 000	5. 000	
0910	650. 7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	2, 700. 000	2, 700. 000	
0920	650. 9910	CONSTRUCTION STAKING SUPPLEMENTAL	LS	1. 000	1.000	
		CONTROL (PROJECT) 01. 8997-00-30				
0930	650. 9920	CONSTRUCTION STAKING SLOPE STAKES	LF	2, 700. 000	2, 700. 000	
0940	690. 0150	SAWING ASPHALT	LF	660. 000	660.000	
0950	690. 0250	SAWI NG CONCRETE	LF	5. 000	5. 000	
0960	715. 0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	4, 975, 000	4, 975. 000	
0970	ASP. 1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.	HRS	1, 200. 000	1, 200. 000	
0970	ASF. ITUA	00/HR	TIKS	1, 200. 000	1, 200. 000	
0980	ASP. 1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	300.000	300, 000	
0990	SPV. 0035	SPECIAL 01. SALVAGED BASE AGGREGATE	CY	600.000	600.000	
		DENSE				
1000	SPV. 0060	SPECIAL 01. ADJUSTING GATE VALVE	EACH	3.000	3.000	
1010	CDV 0040	SPECIAL 02. ADJUSTING CURB STOP	EACH	5. 000	5. 000	
1010	SPV. 0060					
1020	SPV. 0090	SPECIAL O1. CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT	LF	5, 380. 000	5, 380. 000	
1030	SPV. 0105	SPECIAL O1. CONSTRUCTION STAKING	LS	1. 000	1. 000	
1030	364.0105	CONCRETE PAVEMENT JOINT LAYOUT	LO	1.000	1.000	
1040	SPV. 0105	SPECIAL 02. PROJECT CONCRETE CRACK	LS	1. 000	1. 000	
1040	3F V. 0103	MITIGATION AND REPAIR SPECIAL	LJ	1.000	1.000	
1050	SPV. 0165	SPECIAL 01. CONCRETE SIDEWALK CURE AND	SF	13, 900. 000	13, 900. 000	
	0. 1. 0.00	SEAL TREATMENT	0.	10,700.000	.0, ,00. 000	
1060	SPV. 0180	SPECIAL O1. CONCRETE DRIVEWAY CURE AND	SY	830.000	830. 000	
1000	361.0100	SEAL TREATMENT	31	030.000	osu. 000	
1070	SPV. 0180	SPECIAL 02. CONCRETE PAVEMENT HES 6-INCH	01/	320.000	320.000	

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			REMOVING	
			SMALL PIPE	
			CULVERTS	
			203.0100	_
CATEGORY	STATION	SIDE	EA	REMARKS
0010	38 + 40	RT	1	18" CMP
0010	40+85	LT	1	24" CMP
0010	41+29	LT/RT	1	24" CMP
0010	42+48	LT	1	18" CMP
0010	43+35	LT	1	18" CMP
0010	48+05	LT	1	18" CMP
0010	51+25	LT	1	18" CMP
0010	51+90	LT	1	15" CMP
0010	52+65	LT	1	18" CMP
0010	53 + 40	LT	1	18" CMP
0010	53+95	LT	1	15" CMP
0010	55+80	LT	1	12" CMP
0010	59+50	LT	1	12" CMP
0010	60 + 70	LT/RT	1	15" X 21" CMP
0010	61+15	RT	1	12" CMP
0010	61+67	LT/RT	1	12" X 17" CMP
				_
	TOTAL	0010	16	

NOTE: ALL PIPES SHALL BE

CMP = CORRUGATED METAL PIPE

SALVAGED TO THE CITY OF RICE LAKE

EARTHWORK SUMMARY TABLE

Division	Category	From/To Station	Location	Common Excavation (1) Cut (2)	Available Material (5)	Marsh Excavation (6)	Unexpanded Fill	Expanded Fill (13) Factor 1.30	Mass Ordinate +/ (14)	Waste	Comment:
1	0010		Augusta Street Intersection	750	750			0	750	750	
		36+90 - 61+53	Mainline	9440	9440		1620	2106	7334	7334	
			Knapp Street Intersection	390	390			0	390	390	
		39+25 - 43+50	Right side	0	0	180		0	180	180	
			Driveways	340	340			0	340	340	
			UNDISTRIBUTED	120	120	20		0	140	140	
Total				11040	11040	200	1620	2106	9134	9134	
			·	Total Common Exc							

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 5) Available Material = Cut Salvaged/Unusuable Pavement Material
- 6) Marsh Excavation to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0400
- 10) Expanded Marsh Backfill This is to be filled with Backfill Granular. Marsh Backfill Factor = 1.0. Item number 209.0100
- 13) Expanded Fill. Factor = 1.30

Depending on selections: Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor

14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

CONCRETE CURB RAMP CONCRETE CONCRETE SAL VAGED CONCRETE DRIVEWAY CONCRETE DETECTABLE SIDEWALK CURE DRIVEWAY CURE DRIVEWAY HES SIDEWALK WARNING FIELD AND SEAL AGGREGATE AND SEAL 6-INCH 6-INCH 5-INCH NATURAL PATINA TREATMENT TREATMENT DENSE DRIVEWAY 416.0160 416.0260 602.0410 SPV.0035.01 602.0515 SPV.0165.01 SPV.180.01 CATEGORY STATION TO STATION SIDE WIDTH SY SY CY 0010 AUGUSTA INT LT/RT 255 16 255 10 0010 36+90 - 61+73 LT/RT 13,340 13340 410 KNAPP INT 0010 LT/RT 16 241 10 241 0010 38+40 RT 35 35 35 70 15 0010 48+05 RT 35 70 70 15 64 0010 50 + 50RT 60 30 0010 0010 56+50 RT 42 85 85 20 0010 58+50 RT 68 125 125 30 0010 60+05 RT 68 125 125 30 64 0010 61+15 RT 19.5 60 64 60 15 0010 UNDISTRIBUTED 105 105 TOTAL 0010 630 200 13,900 13,900 600

			BASE AGGREGATE		CONCRETE	CONCRETE		CONCRETE PAVEMENT
			DENSE	SUBBASE	PAVEMENT	PAVEMENT	DRILLED	HES
			1 1/4-INCH	12-INCH	6-INCH	GAPS	TIE BARS	6-INCH
			305.0120	350.0145	415.0060	415.0210	416.0610	SPV.0180.02
CATEGORY	STATION TO STATION	SIDE	TON	SY	SY	EACH	EACH	SY
0010	AUGUSTA INT	LT/RT	360	1,120	690	-	-	_
0010	36+90 - 61+53	LT/RT	3,250	10,600	8,760	-	-	-
0010	KNAPP INT	LT/RT	190	580	500	-	51	-
0010	UNDISTRIBUTED		=	=	-	10	-	320
	TOTA	L 0010	3,800	12,300	9,950	10	51	320

			CONCRETE	
		REMOVING	SURFACE	SAWING
		PAVEMENT	DRAINS	CONCRETE
		204.0100	416.1010	690.0250
CATEGORY	STATION SIDE	SY	CY	LF
0010	61+00 LT	15	0.6	5
0010	60+00 LT	<u></u>	0.9	100
0010	UNDISTRIBUTED	-	1.0	1-1
	TOTAL 0010	15	2.5	5

PROJECT NUMBER: 8997-00-30 HWY: LOCAL STREET COUNTY: BARRON MISCELLANEOUS QUANTITIES SHEET NO: E

FILE NAME: G:\2011-proj\11115082\dwg\030101_mq.dwg PLOT DATE: Nov 04, 2013 - 11:31am PLOT BY:Owner PLOT NAME: MISQ(1) ORG. DATE: Oct 19, 1999 Originator: PLOT SCALE: NONE WISDOT/CADDS SHEET 42

DRIVEWAYS ASPHALTIC CATEGORY STATION to STATION OFFSET SIDE LF LF	RUGATED CULVER' TEEL PIPE STE -INCH 12-INCH L.0124 521.101 LF EA	STEEL PIPE STEEN NCH 15-INCH 1012 521.1015	EL PIPE STEEL 24-INCH	CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-I 19x30-INCL 523.0419 LF	L HORIZONTAL CULVERT V ELLIPTICAL PIPE H 19x30-INCH CHECKS
ASPHALTIC AND FIELD SURFACE ASPHALTIC ASPHALTIC SAWING SURFACE ENTRANCES TEMPORARY CURB FLUME ASPHALT 465.0105 465.0125 465.0310 465.0315 690.0150 465.0150	 34 -	2 -	- 2	- - 62	- 1 - 2
0010 AUGUSTA INT LT/RT 70 15 10 74 4" MIN. DEPTH 0010 37+44 - 61+53 LT/RT 540 3" DEPTH 0010 61+63 - 61+91 LT/RT	- 2 	-	-	- 78	- 1 2 2
0010 KNAPP INT LT/RT 22 0010 36+40 LT - 17 48 3" MIN. DEPTH TOTAL 0010 26 34 0010 38+40 RT - 5 20 3" MIN. DEPTH	34 2	2	2	140	4 8
0010 40+85 LT - 15 - - - 22 3" MIN. DEPTH NOTE: MIN. THICKNESS FOR CULVERT PIPE CORRUGATED STEEL STEEL STATES 0010 42+65 LT - 5 - - - 3" MIN. DEPTH 0010 43+35 LT - 6 - - - 3" MIN. DEPTH 0010 48+05 LT - 13 - - 22 3" MIN. DEPTH	HALL BE 0.064"	!"			
0010 [1,00 1	H 6-INCH CD SLOPED GUT CH 36-INCH AN A TYPE D TR 55 601.0557 SPV LF - 50 20 -	AND SEAL TREATMENT	CATEGOR 0010 0010 0010 0010 0010 0010 0010 0	39+00 40+64 41+29 41+87 43+50 45+50 61+90 UNDISTRIB	RT 1.5 8 RT 0.9 6 LT 2.0 10 LT 2.7 13 RT 1.4 8 RT 1.0 6 RT 1.3 7 RT 6.3 25
APRON APRON APRON STORM STORM STORM STORM STORM STORM ENDWALLS FOR ENDWALLS FOR ENDWALLS FOR SEWER PIPE SEWER PIPE SEWER PIPE SEWER PIPE SEWER PIPE CULVERT PIPE CULVERT PIPE CULVERT PIPE REINFORCED REINFORCED REINFORCED REINFORCED REINFORCED MANHOLE REINFORCED REINFORCED REINFORCED CONCRETE	MEDIAN PLAT		INLET ENE PROTECTION	INLET N PROTECTION TYPE C	
522.1015 522.1018 522.1027 522.1030 608.0412 608.0415 608.0418 608.0421 608.0427 608.0430 611.0535 611.0624 611.0639 611.0645 611.2004 611.2006 611.3230 611.0624 611.0639 611.0645 611		.8120.5 612.0902 EA SY	2.5 628.7010 EA	628.7015 EA	REMARKS
0010 39+00 LT/RT 1 32 22 2 2 0010 41+87 - 41+97 LT 1 10 6 2 2 2 0010 41+87 - 41+97 RT 1 10 22 2 2 010 41+87 - 41+97 RT 1 10 22 2 2 2 010 43+50 LT/RT - 1 62 2 2 2	- 2 - 2 - 2 1 -	2 - 2 - 2 -	- - - 1	2 2	INLET#1A & 1B; OUTFALL#1 INLET#2A & 2B; OUTFALL#2 INLET#3A & 3B; OUTFALL#3 INLET#4: OUTFALL#4
0010 45+50 LT/RT - - 1 32 - - - - 22 - 2 - - - 1 1 0010 45+50 - 48+40 RT - </td <td>- 2</td> <td>2 -</td> <td></td> <td>2</td> <td>INLET#5A; INLET/MH#5B; OUTFALL INLET/MH#5B - MH#6</td>	- 2	2 -		2	INLET#5A; INLET/MH#5B; OUTFALL INLET/MH#5B - MH#6
0010 48+40 LT/RT 4 38 1 2 - 2 - 1 2 0010 48+40 - 51+58 12' RT	1 3	3 -	1 -	-	INLET#6A,6B & 6C; MH#6 MH #6 - MH #7
0010 51+58 LT/RT 4 38 1 2 - 2 1 - 2 0010 51+58 - 52+86 12' RT 128	1 3	3 5	1		INLET#7A,7B,&7C; MH#7 MH#7 - MH#8
0010 52+86 LT/RT 4 38 1 2 - 2 1 - 2	1 3	3 5	1	2	INLET#8A,8B & 8C; MH#8 MH#8 - MH#9
0010 54+62 - 54+72 LT/RT 14 38 1 3 - 2 1 - 3	1 4	4 5	1	3	INLET#9A,9B,9C&9D; MH#9
0010 58+90 - 59+00 LT/RT 42 1 3 1 - 3 0010 59+00 - 61+00 12' RT	- 4	4 - - 7	-		INLET#10A,10B & 10C; MH#10 MH#10 - MH#11
0010 60+92 - 61+00 LT/RT 20 - 10 - 28 - 1 - 4 2 - 1 4 0010 61+00 - 61+72 12' RT 72	1 5 - 1	5 7 - 7 1 -	1 - -	4 -	INLET & MH#11; MH#11 - MH#12 MH#12; OUTFALL#12
TOTAL 0010 3 1 1 1 172 402 248 446 144 312 7 16 8 12 4 4 23	6 31	31 36	6	24	ı
PROJECT NUMBER: 8997-00-30 HWY: LOCAL STREET COUNTY: BARRON MISCELLANEOUS QUANTITIES FILE NAME: GARAGE And ORGANIC and Auto-Country and Auto-					SHEET NO:

FILE NAME: G:\2011-proj\11115082\dwg\030101_mq.dwg PLOT DATE: Nov 04, 2013 - 11:32am PLOT BY:Owner PLOT NAME: MISQ(2) ORG. DATE: Oct 19, 1999 Originator: PLOT SCALE: NONE WISDOT/CADDS SHEET 42

	0100 625.0100 625.0500 627.0200 628.2002 629. AL SY SY SY SY CO 0 4800 2400 7200 - 9 370 - 9 0 1800 - 1800 30 7	SEEDING LIZER MIXTURE E A NO. 40 0205 630.0140 WT LB 5 130 2 2 20 7 150	SILT SILT FENCE DITCH TRACKING FENCE MAINTENANCE CHECKS PADS 628.1504 628.1500 628.7504	
CATEGORY STATION OFFSET SIDE CODE DESCRITPION 0010 36+60 38' RT R1-1 STOP 0010 37+50 20' RT R2-1 Speed Limit-MPH 0010 38+05 27' RT R2-1 Speed Limit-MPH	634.0416 637.2210 638.2102 WIDTH HEIGHT (IN) (IN) EA SF EA 30 30 1 24 30 1 5 - 24 30 24 30 24 30	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT	TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL TRAFFIC CONTROL SIGNS SIGNS CATEGORY DAYS # DRUMS DAYS # DAYS # LIGHTS DAYS # SIGNS DAYS DAYS # SIGNS DAYS	
4-INCH	KING STOP MARKING NE EPOXY REFLECTIVE 18-INCH TAPE 4-INCH 47.0566 649.0300 LF LF	CONSTRUCTION CONSTRUCTION STAKING STAKING STAKING STORM SEWER SUBGRADE 650.4000 650.4500 STATION TO STATION EACH LF 35+29 - 62+25 43 2700 TOTAL 0010 43 2700	CURB & GUTTER CULVERTS PAVEMENT SLOPE STAKES 0020 49+45 18' LT - 1	P
PROJECT NUMBER: 8997-00-30	HWY: LOCAL STREET C	OUNTY: BARRON	MISCELLANEOUS QUANTITIES SHEET NO:	Е

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL		INTEREST	R/W ACRES REQUIRED			TLE ACRES	
NUMBER		REQUIRED	NEW	EXISTING	TOTAL	Heres	
1	RICE LAKE DENTAL PROPERTIES, LLC	FEE,TLE	0.009	0.00	0.009	0.054	
2	MARC G., DEANA K., JASON L. and ELIZABETH J. HALLE	FEE,TLE	0.024	0.00	0.024	0.227	
3	BARTA PROPERTIES, LLC	TLE	0.00	0.00	0.00	0.086	
4	PATRICK AND SUSAN HAUCK	TLE	0.00	0.00	0.00	0.202	

PROJECT LOCATION CUTY OF RICE 出日 NOT TO SCALE

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY

DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD

SUBSTITUTE FOR AN ACCURATE FIELD SURVEY

AND PERPENDICULAR TO NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR

THE FOLLOWING POINTS OF REFERENCE:
1. CSM #4346 V.30, P.95

2. CSM #2216 V.16, P.14

4. CSM #5433 V.37, P.B1

	UTILITY EASEMENT INFORMATION		
	PARCEL #	COMPANY NAME	RECORDING DATA
i	4	GENERAL TELEPHONE/ TELEPHONE USA OF WIS.	V.420, P.882,V.885, P.316

A PART OF LOT 1, CSM #4346, AND LOT 1, CSM #2216 BEING A PART OF THE SE-NE OF SECTION19, T35N-R11W, TOWN OF RICE LAKE AND A PART OF LOTS 1, 2 AND 3, CSM #5433 BEING A PART OF THE SW-NW OF SECTION 20, T35N-R11W, CITY OF RICE LAKE, BARRON COUNTY, WISCONSIN

RELOCATION ORDER WEST AVENUE AUGUSTA STREET - KNAPP STREET BARRON COUNTY

TRANSPORTATION PROJECT PLAT NO: 8997-00-29 - 4.01

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF RICE LAKE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02(3) AND 84.09 WISCONSIN STATUTES, THE CITY OF RICE LAKE HEREBY ORDERS THAT: 1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.

2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY OF RICE LAKE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF RICE LAKE, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS PROJECT NUMBER 899970029-4.01

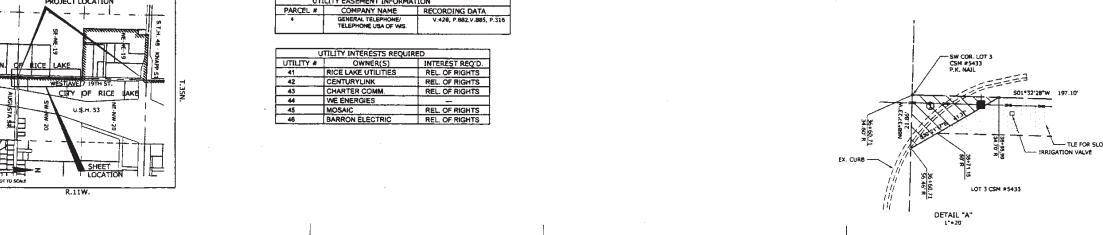
ACCEPTED FOR RECORDING AND FILING IN

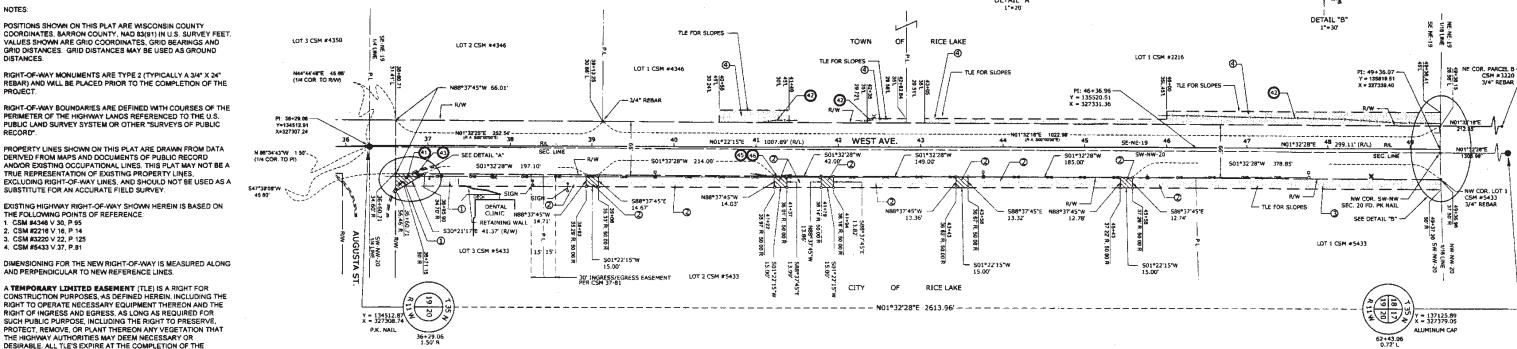
THE DEFICE OF THE REGISTER OF DEEDS

FILED IN Volume LIMC, Place 16-0A

Margo Kalilotagen SIGNATURE OF REGISTER OF DEEDS

IN BARRON COUNTY, WISCONSIN AT 09.45 AM ON _03-01-2013





RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLE'S EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN

CONVEN	NTIONAL	ABBREVIATIONS	
ACCESS POINT/	AP	RELEASE OF RIGHTS	RO
DRIVEWAY CONNECTION		REMAINING	REI
ACCESS RIGHTS	AR	RIGHT-OF-WAY	R/V
ACRES	AC.	SECTION	SE
AND OTHERS	ET.AL.	STATION	STA
CENTERLINE	C/L	TEMPORARY LIMITED EASEME	NTTLE
CERTIFIED SURVEY MAP	CSM	VOLUME	V.
CORNER	COR.		
DOCUMENT	DOC.	CURVE DATA	
EASEMENT	EASE.	LONG CHORD	LCI
HIGHWAY EASEMENT	H.E.	LONG CHORD BEARING	LCE
LAND CONTRACT	LC.	RADIUS	R
MONUMENT	MON.	DEGREE OF CURVE	Đ
PAGE	Ρ,	CENTRAL ANGLE OR DELTA	DE
DEDUCATED TATED EACEN	ENIT DIE	CENTINE MIGGE ON DELLA	

(100')

TANGENT

TAN

	COM (CNITIO	NA CVAROLO	
		NAL SYMBOLS	
FOUND IRON PIPE/PIN	(1" UNLESS NOTED)	PROPOSED R/W LINE	
	(1 341133 143110)	EXISTING M.E. LINE	
R/W MONUMENT	• • (SET)	PROPERTY LINE	
R/W STANDARD	▲ ▲ (SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONU	MENT	CORPORATE LIMITS	www
SECTION CORNER SYMBO	DL 🙀	NO ACCESS (BY PREVIOUS ACQUISITI	ON/CONTRO
FEE (HATCH VARIES)	12221	NO ACCESS (BY ACQUISITION)	шин
TEMPORARY LIMITED EASEMENT	1-942-1-94	NO ACCESS (BY STATUTORY AUTHOR)	**************************************
PERMANENT LIMITED EASEMENT	THE STREET	SECTION LINE	
R/W BOUNDARY POINT	(1055)	QUARTER LINE	
PARCEL NUMBER	(10)	SIXTEENTH LINE	
SIGN NUMBER	X	EXISTING CENTERLINE	
(OFF PREMISE)	61-1)	PROPOSED REFERÊNCE LII	VE 奏
BUILDING		PARALLEL OFFSET	TIT

CONVENTIONAL UTILITY SYMBOLS	
TELEPHONETOVERNÉAD ELECTRIC ONE	
ELECTRIC — E—	
FIBER OPTIC ——FO——	
	GN
NON COMPENSABLE COMPENSABLE POWER POLE	SCALE, FEET
TELEPHONE POLE & TELEPHONE PEDESTAL X	0 60 120
ALIGNMENT TIE: W 1	1/4 COR. SEC. 20 TO STA. 36+29.06 WEST AVENUE = N88°34'43"W 1.50'



I, JON M. NELSON, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84,095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF RICE LAKE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 8997-00-29 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



LOT 1 CSM #2216

LOT 1 CSM #5433

PARCEL B CSM #3220

PI: 49+36.07

Ammulon DATE 2-27-17 JON M. NELSON, AGENT FOR COOPER ENGINEERING CO., INC., RICE LAKE, WI.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF RICE LAKE... JIM ANDERSON, DIRECTOR OF COMMUNITY SERVICES

PROPERTY LINE

RECORDED AS

REFERENCE LIN

NON COMPENSABLE COMPENSABLE

120

ALIGNMENT TIE: W 1/4 COR. SEC. 20 TO STA. 49+36.07 WEST AVENUE = N01°20'39"W 1307.00'

POWER POLE

TELEPHONE POLE

TELEPHONE PEDESTAL X

PERMANENT LIMITED EASEMENT PLE

COR.

DOC.

H.E.

(100')

1C

CURVE DATA

LONG CHORD

RADIUS

TANGENT

LONG CHORD BEARING

CENTRAL ANGLE OR DELTA

DEGREE OF CURVE

LENGTH OF CURVE

FEE (HATCH VARIES)

TEMPORARY LIMITED

PERMANENT LIMITED EASEMENT

R/W BOUNDARY POINT

PARCEL NUMBER

SIGN NUMBER (OFF PREMISE)

BUILDING

NO ACCESS (BY ACQUISITION)

SECTION LINE

QUARTER LINE

SIXTEENTH LIN

PARALLEL OFFSET

EXISTING CENTERLINE

NO ACCESS (BY STATUTORY AUTHORITY)

PROPOSED REFERENCE LINE

口子

VZZZ

Ki Mik

CORNER

DOCUMENT

EASEMENT

MONUMENT

HIGHWAY EASEMENT

LAND CONTRACT

PROPERTY LINE

RECORDED AS

REFERENCE LIN

Ammuelmo DATE 2-27-13

JON M. NELSON, AGENT FOR COOPER

5,1940

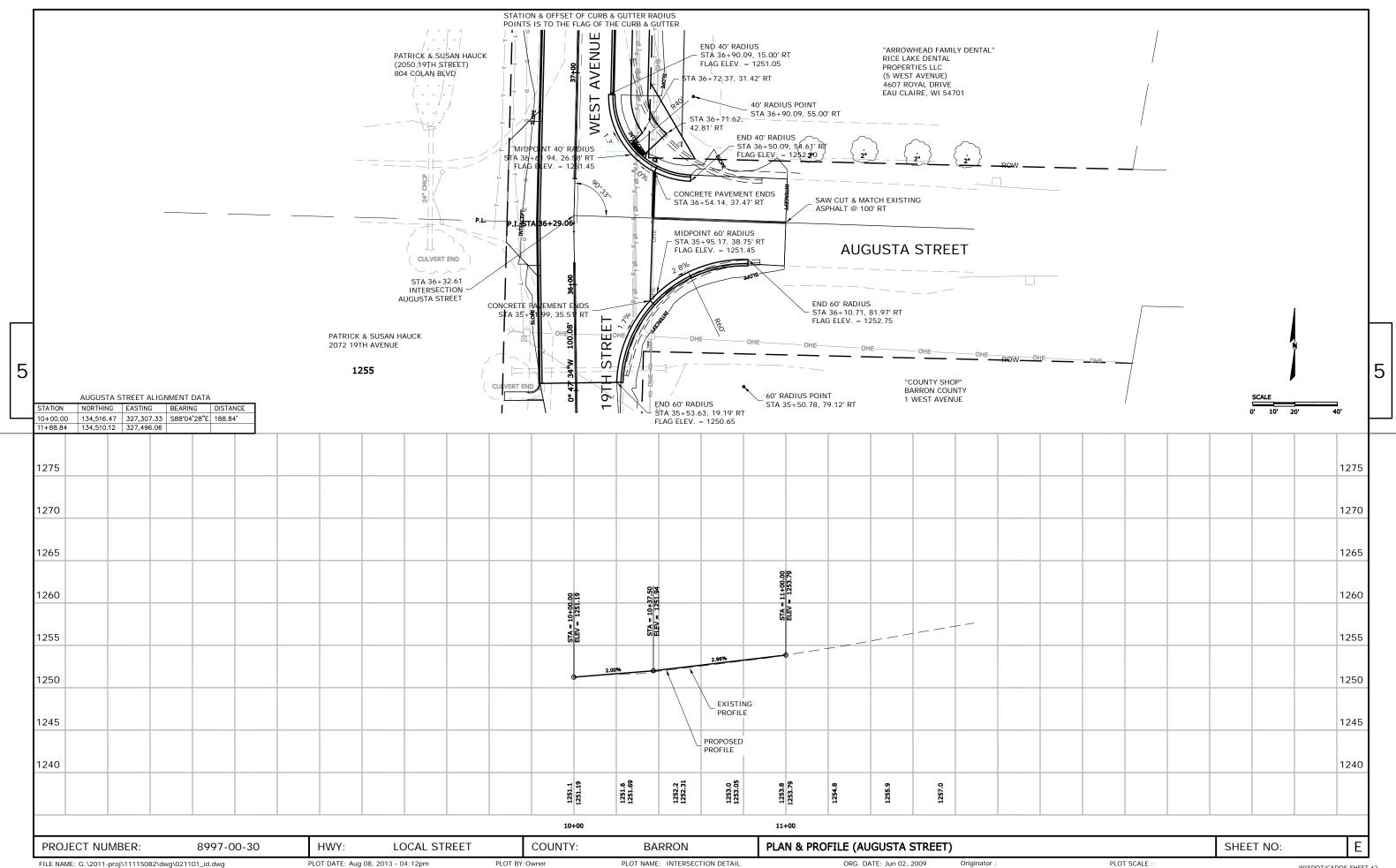
ENGINEERING CO., INC., RICE LAKE, WI

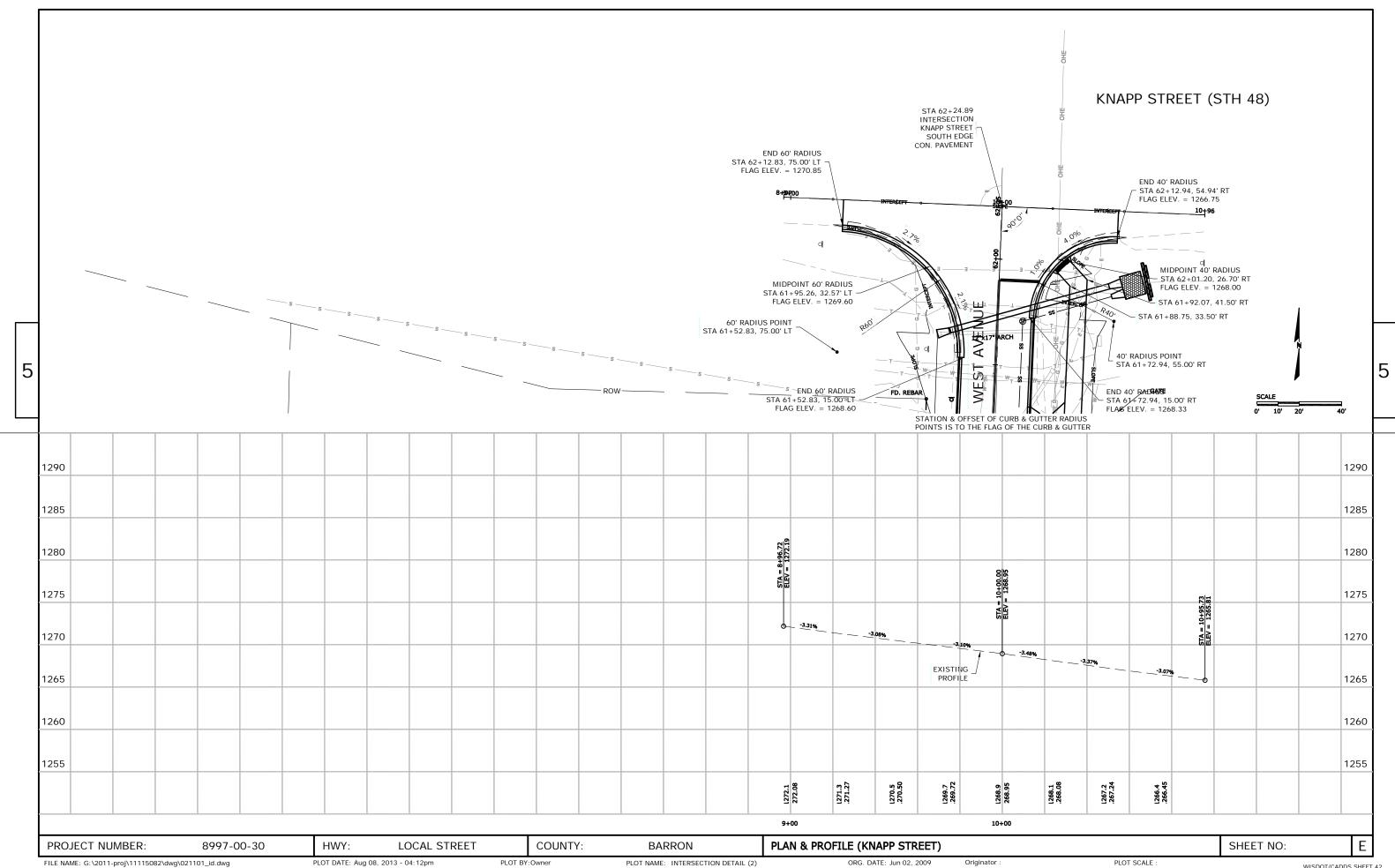
THIS PLAT AND RELOCATION ORDER ARE

APPROVED FOR THE CITY OF RICE LAKE ..

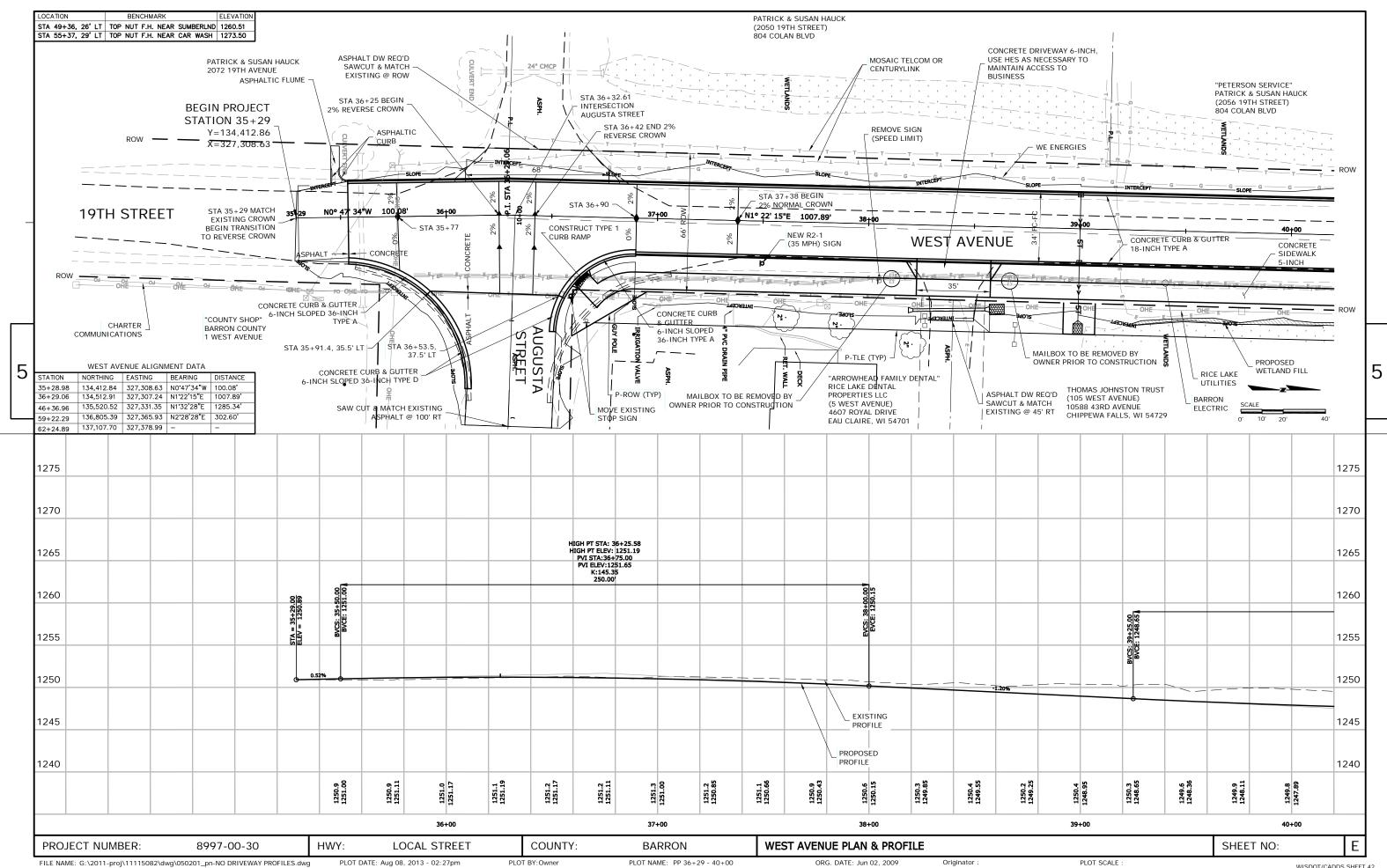
JIM ANDERSON, DIRECTOR OF COMMUNITY SERVICES

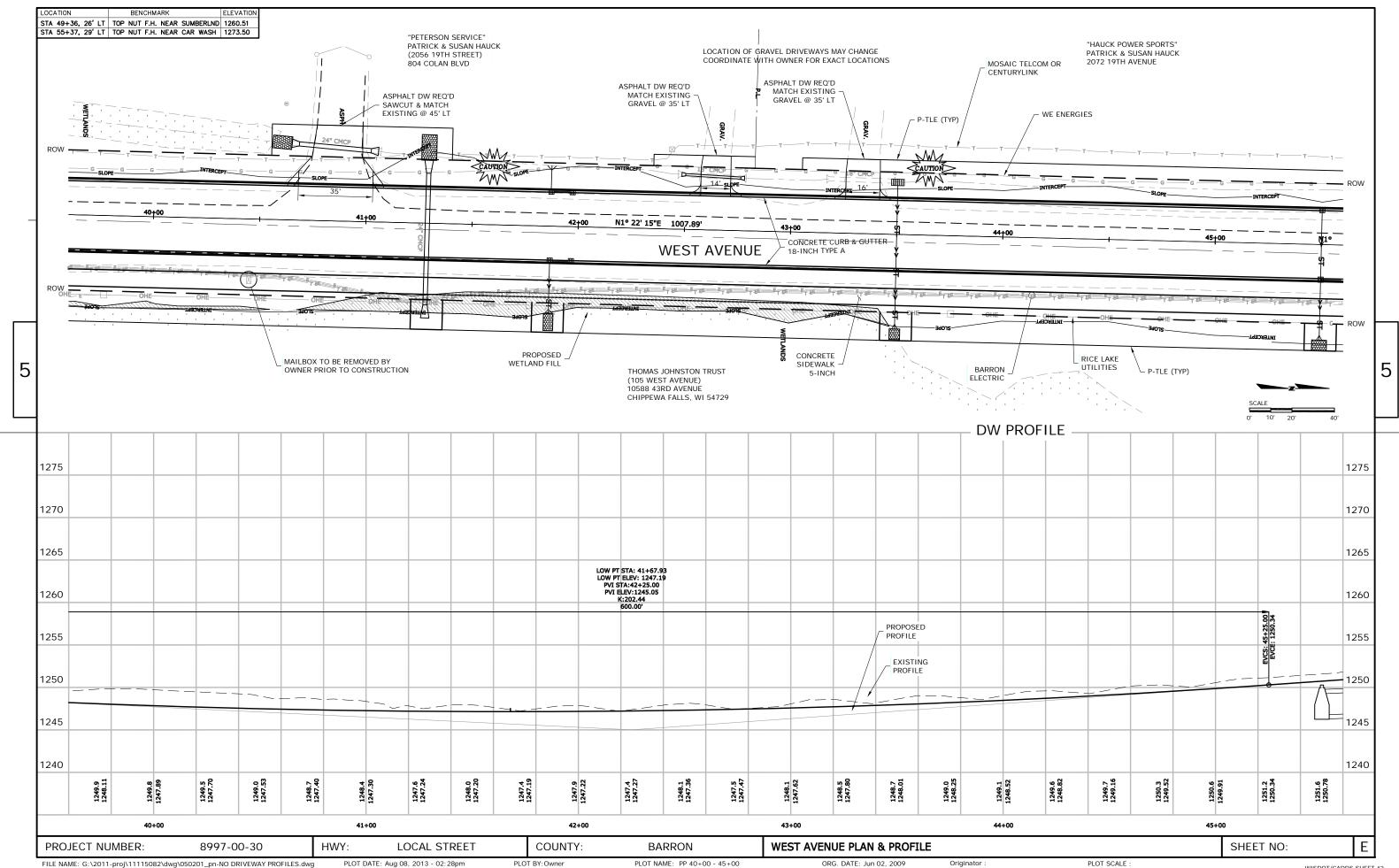
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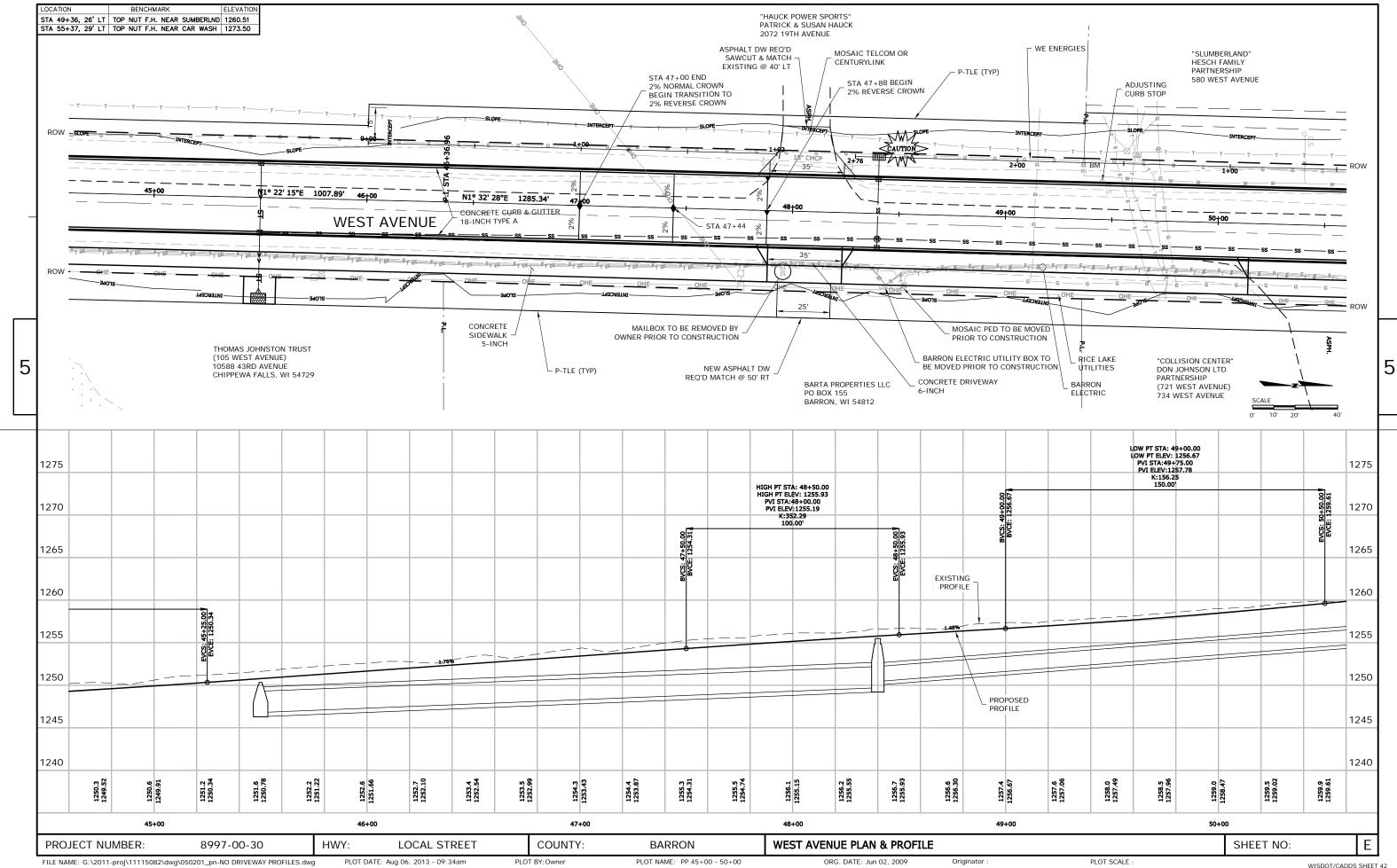
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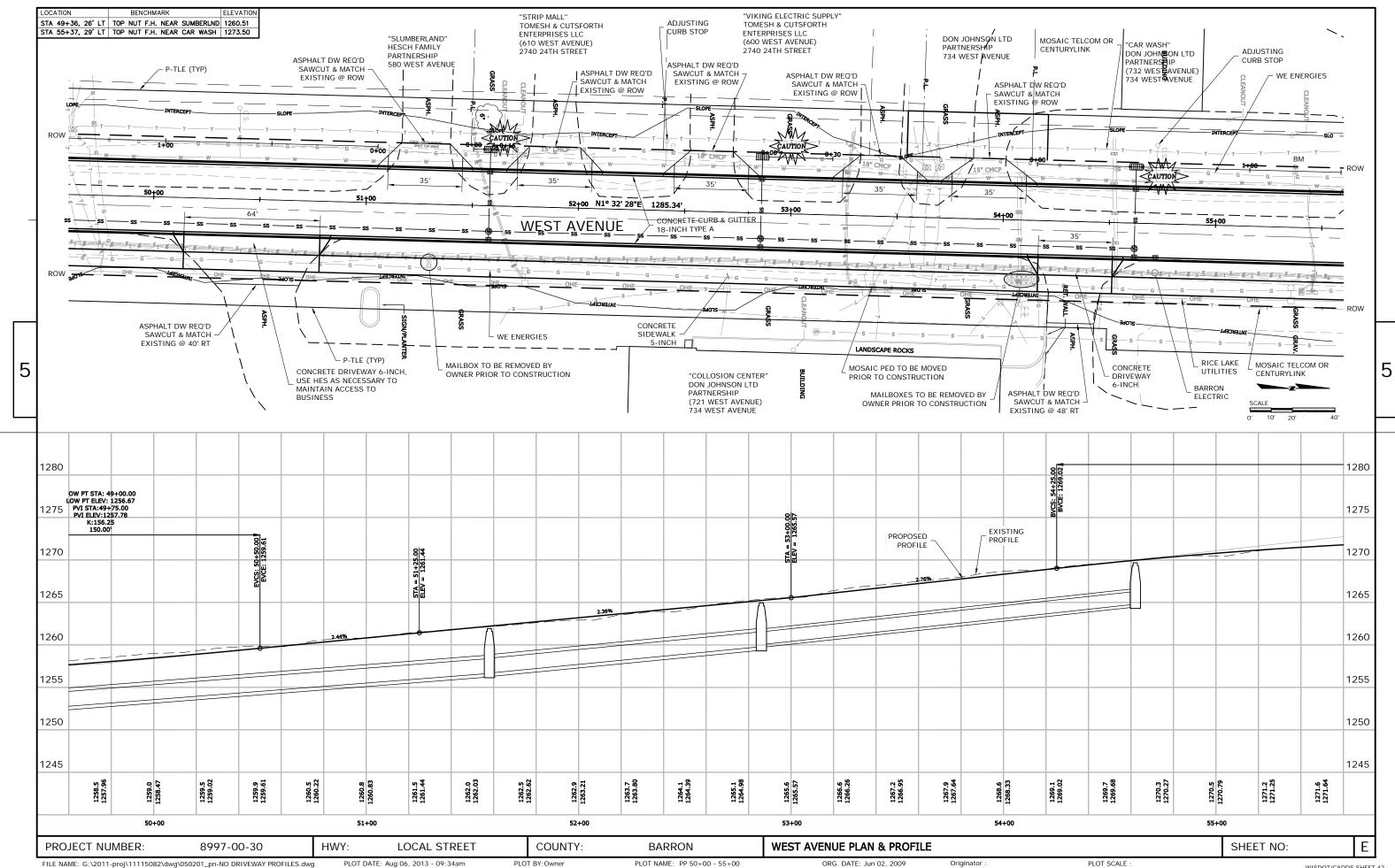


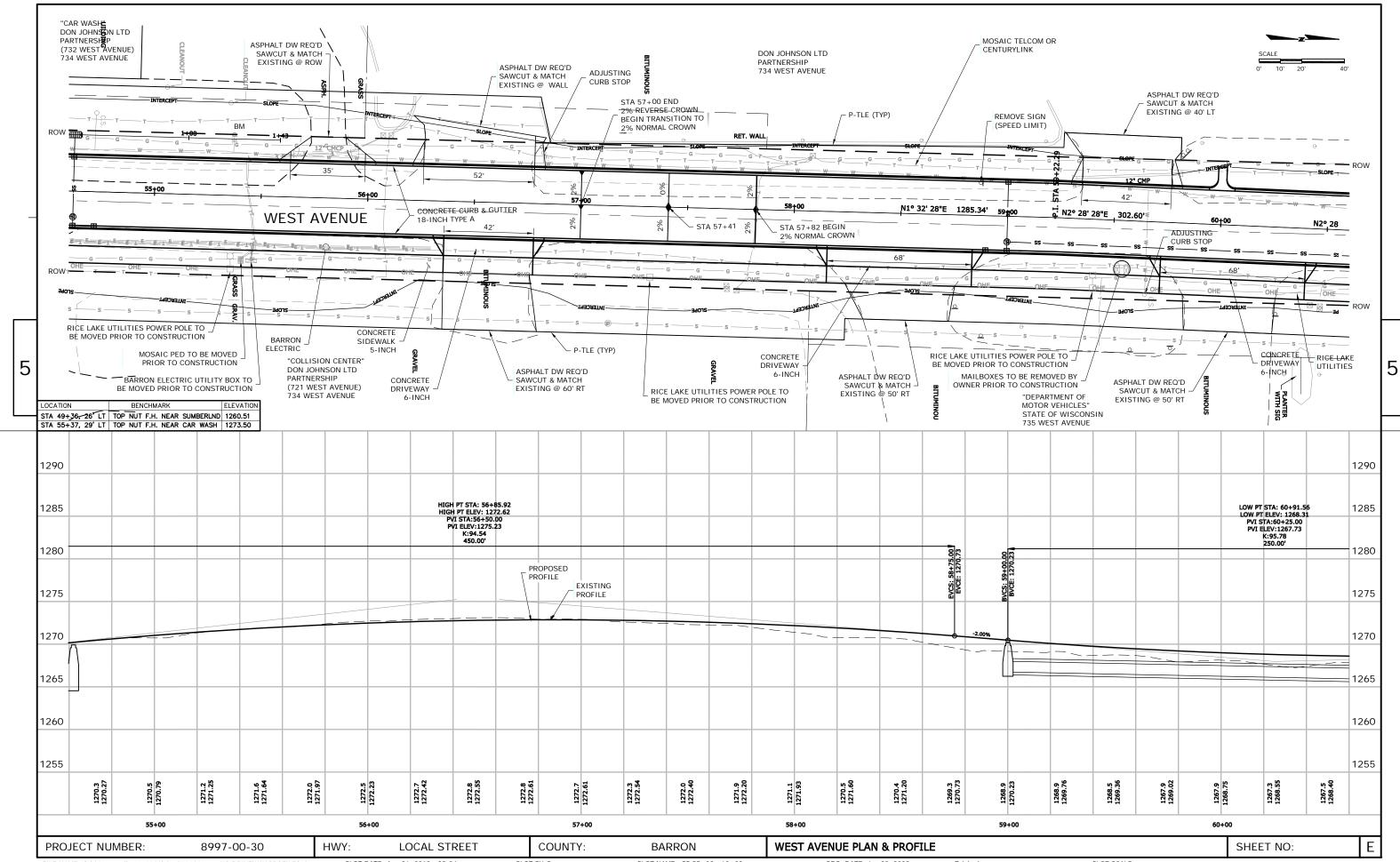


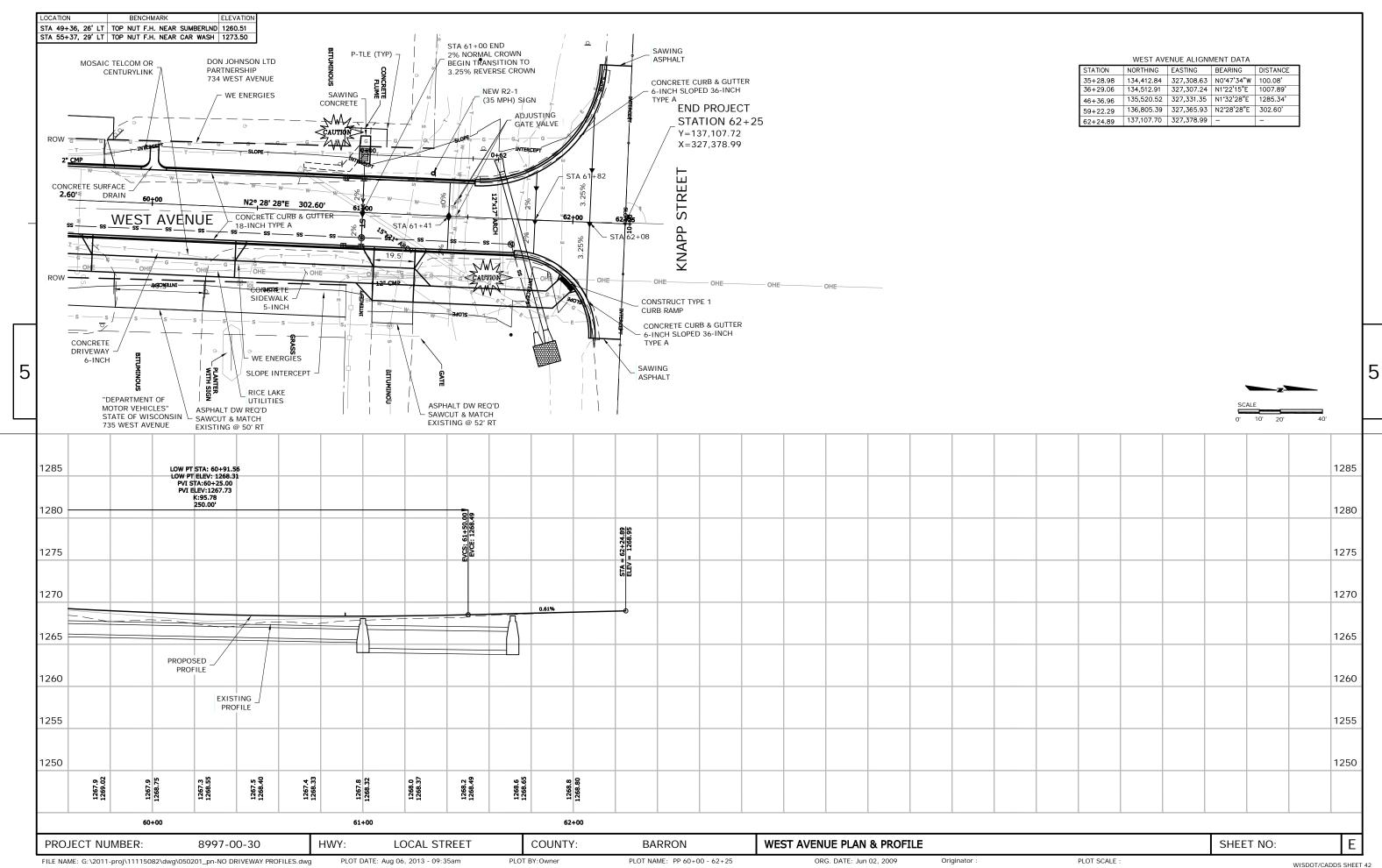
PLOT BY: Owner

Originator





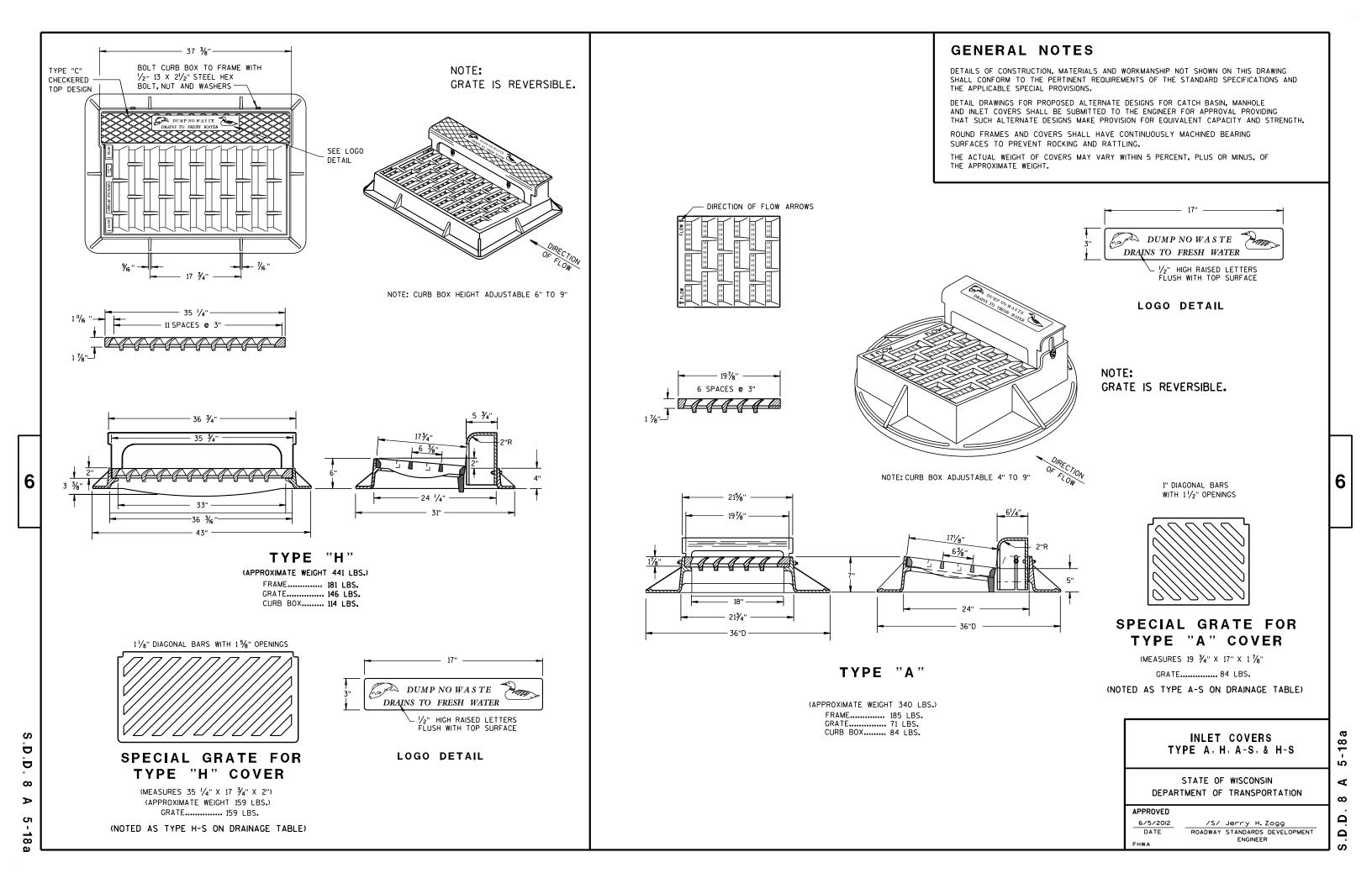


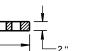


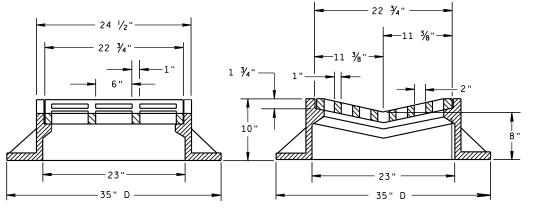
Standard Detail Drawing List

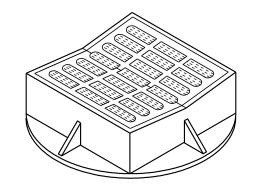
08A05-18A 08A05-18B 08A05-18C 08A05-18D 08B09-01 08C07-01 08C08-01 08D01-17 08D04-05 08D05-15A 08E08-03 08E09-06 08E10-02 08E14-01 08F01-11 08F02-01 08F04-07 09A01-13A 13C01-16 13C04-16 13C18-02A 13C18-02B 13C18-02C 13C18-02D 15C02-05A 15C02-05B 15C03-02 15C04-02 15C05-02 15C08-16A 15C08-16B	INLET COVERS TYPE A, H, A-S, & H-S INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT INLETS MEDIAN 1 AND 2 GRATE CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES CONCRETE SURFACE DRAIN & ASPHALTIC FLUMES CURB RAMPS TYPES 1 AND 1-A TYPI CAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS SILT FENCE INLET PROTECTION TYPE A, B, C AND D TRACKING PAD APRON ENDWALLS FOR CULVERT PIPE APRON ENDWALLS FOR CULVERT PIPE APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE CONCRETE PAVEMENT LONG TUDINAL JOINTS AND TIES URBAN NON-DOWELD CONCRETE PAVEMENT CONCRETE PAVEMENT JOINTING CONCRETE PAVEMENT JOINTING CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES BARRICADES AND SIGNS FOR MAINLINE CLOSURES BARRICADES AND SIGNS FOR MAINLINE CLOSURE
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6









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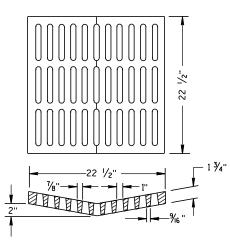
Ö

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TYPE "B" (APPROXIMATE WEIGHT 405 LBS.)

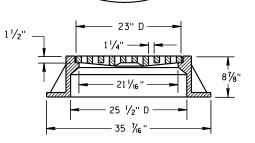
FRAME......294 LBS. GRATE..... 111 LBS.



ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 134 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE. NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 259 LBS.)

FRAME...... 152 LBS. GRATE..... 107 LBS.

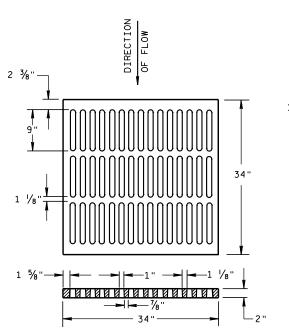
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

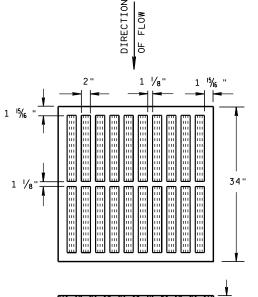
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

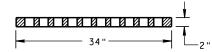


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 329 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



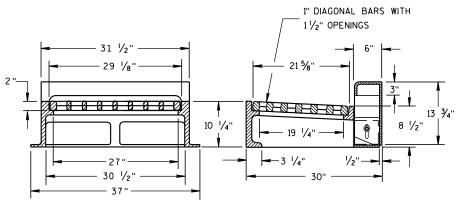


TYPE "MS"

(APPROXIMATE GRATE WEIGHT 268 LBS.)

USE ON FREEWAYS AND EXPRESSWAYS NOTED AS TYPE MS ON DRAINAGE TABLE

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 648 LBS.)

GRATE..... 156 LBS. CURB BOX..... 137 LBS.

INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

> STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012 /S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

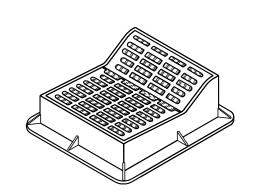
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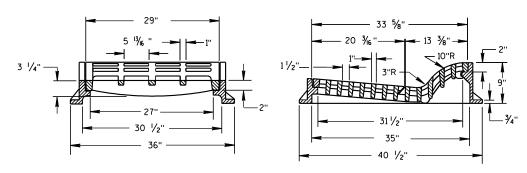
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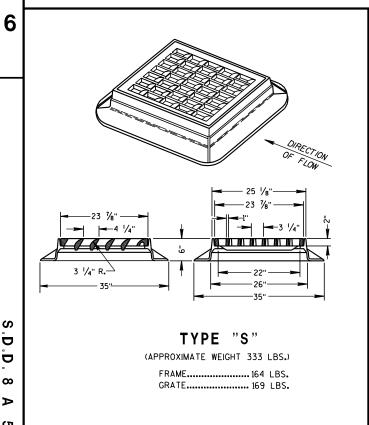


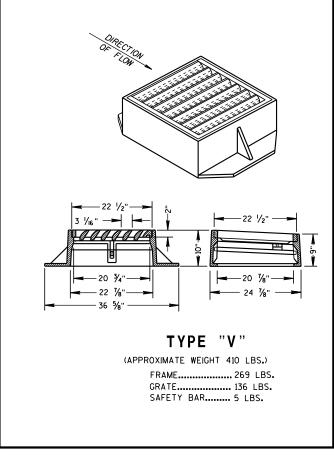
TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME......302 LBS. GRATE......160 LBS. GRATE...... 182 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



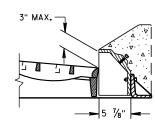


GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR FOUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF

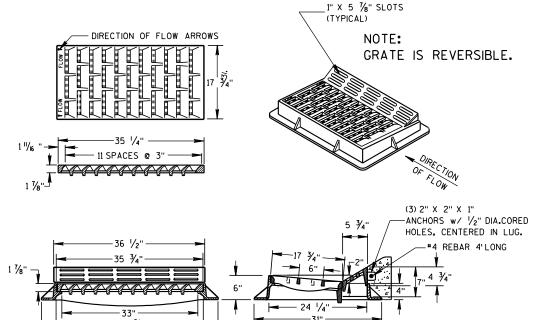


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

> NOTE: SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE



TYPE "HM"

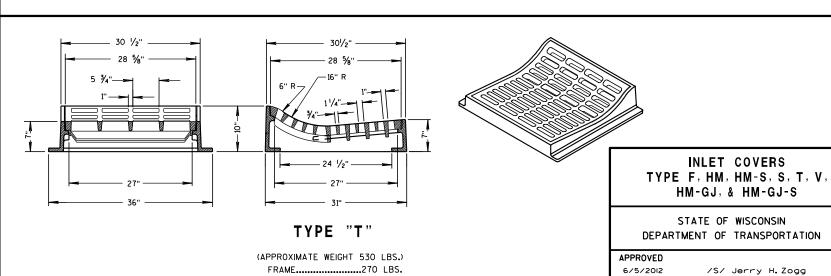
(APPROXIMATE WEIGHT 414 LBS.) FRAME...... 181 LBS.159 LBS. GRATE... CURB BOX..... 74 LBS.

NOTE: SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM" COVER NOTED AS TYPE HM-S ON DRAINAGE TABLE

ROADWAY STANDARDS DEVELOPMENT ENGINEER

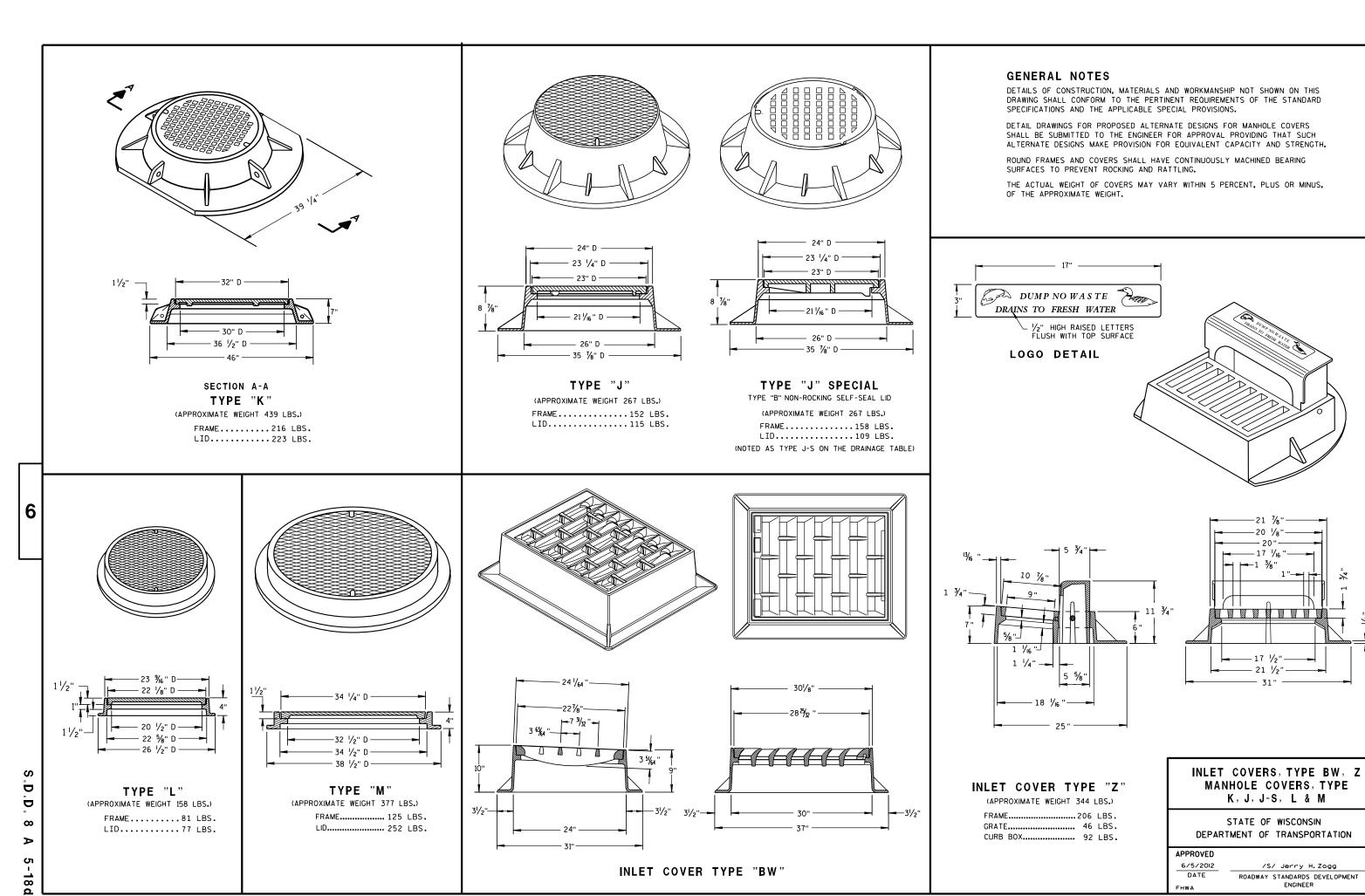
DATE

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



GRATE.....260 LBS.

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



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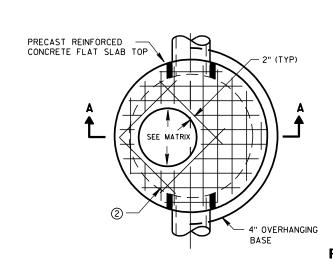
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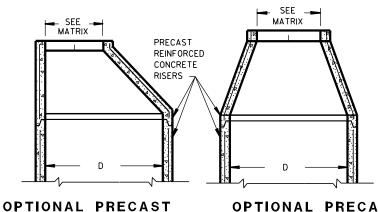


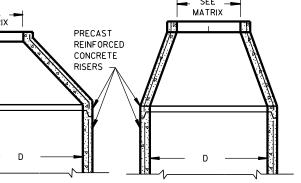


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TOP WITH PLAIN END JOINT

PLAN VIEW CIRCULAR OPENING

SEE

MORTAR

MATRIX

SEE DETAIL "B"

PLANS

8

CONCRETE

(MIN. SLOPE 1 IN./FT.

CONTRACTOR TO PROVIDE DRAWING(S)

STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

CONCRETE WITH

MONOLITHIC BASE

SEE DETAIL "A"

REINFORCED CONCRETE **ECCENTRIC TOP**

PRECAST

(3)

WALL

PRECAST REINFORCED

CONCRETE FLAT SLAB TOP

√2" CEMENT

- MORTAR

BEVEL 45°

2 COURSES

6" BLOCK

- 4" MIN.

(3)

SPLIT PIPE OR FORM CONCRETE TO FIT

CAST-IN-PLACE OR

PRECAST REINFORCED

CONCRETE BASE ②

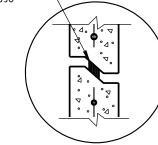
PLASTER COAT

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

(TYP)

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS **RECOMMENDATIONS** CONFORMING TO ASTM C990

TOP WITH TONGUE AND GROOVE JOINT



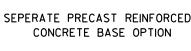
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

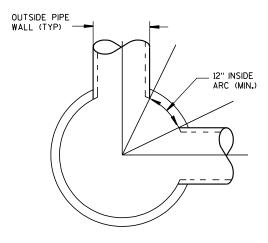
PRECAST WALL MORTAR (3) PRECAST REINFORCED CONCRETE BLOCK WITH

PRECAST REINFORCED

CONCRETE WITH INTEGRAL BASE OPTION



DETAIL "A"



DETAIL "C"

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER. THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT: MINIMUM LENGTH OF 10 INCHES: MINIMUM WALL EMBEDMENT OF 3 INCHES, FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF $\frac{1}{2}$ " AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

- MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT. 6 INCHES FOR 5-FT, 7 INCHES MINIMUM WALL INICINESS SHALL BE 4 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.
- (2) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- (3) PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	С	ALL J'S	К	L	М
OPENING SIZE (FT)					
2 DIA.	×	х		Х	
3 DIA.			Х		Х

PIPE MATRIX

MANHOLE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES							
SIZE	180° SEPARATION (IN)	90° SEPARATION (IN)						
3-FT	15	12						
4-FT	24	18						
5-FT	36	24						
6-FT	42	36						
7-FT	48	36						
8-FT	60	42						

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT 7-FT AND 8-FT DIAMETER

> STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED	
6/5/2012	/S/ Jerry H. Zogg
DATE	ROADWAY STANDARDS DEVELOPMENT
EUW A	ENGINEER

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED.

OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

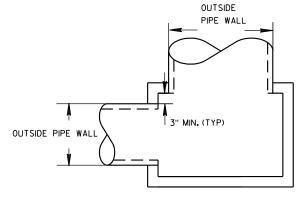
- ① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	вw	F	ALL H'S	s	Т	٧	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	Х	Х				Х		Х	
2X2.5-FT	2	2.5			Х			Х	Х	Х	Х
2X3-FT	2	3					Х				
2.5X3-FT	2.5	3				Х					

PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER						
INLET SIZE	WIDTH (IN)	LENGTH (IN)					
2X2-FT	12	12					
2X2 . 5-FT	12	18					
2X3-FT	12	24					
2.5X3-FT	18	24					



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012 /S/ Jerry H. Zogg

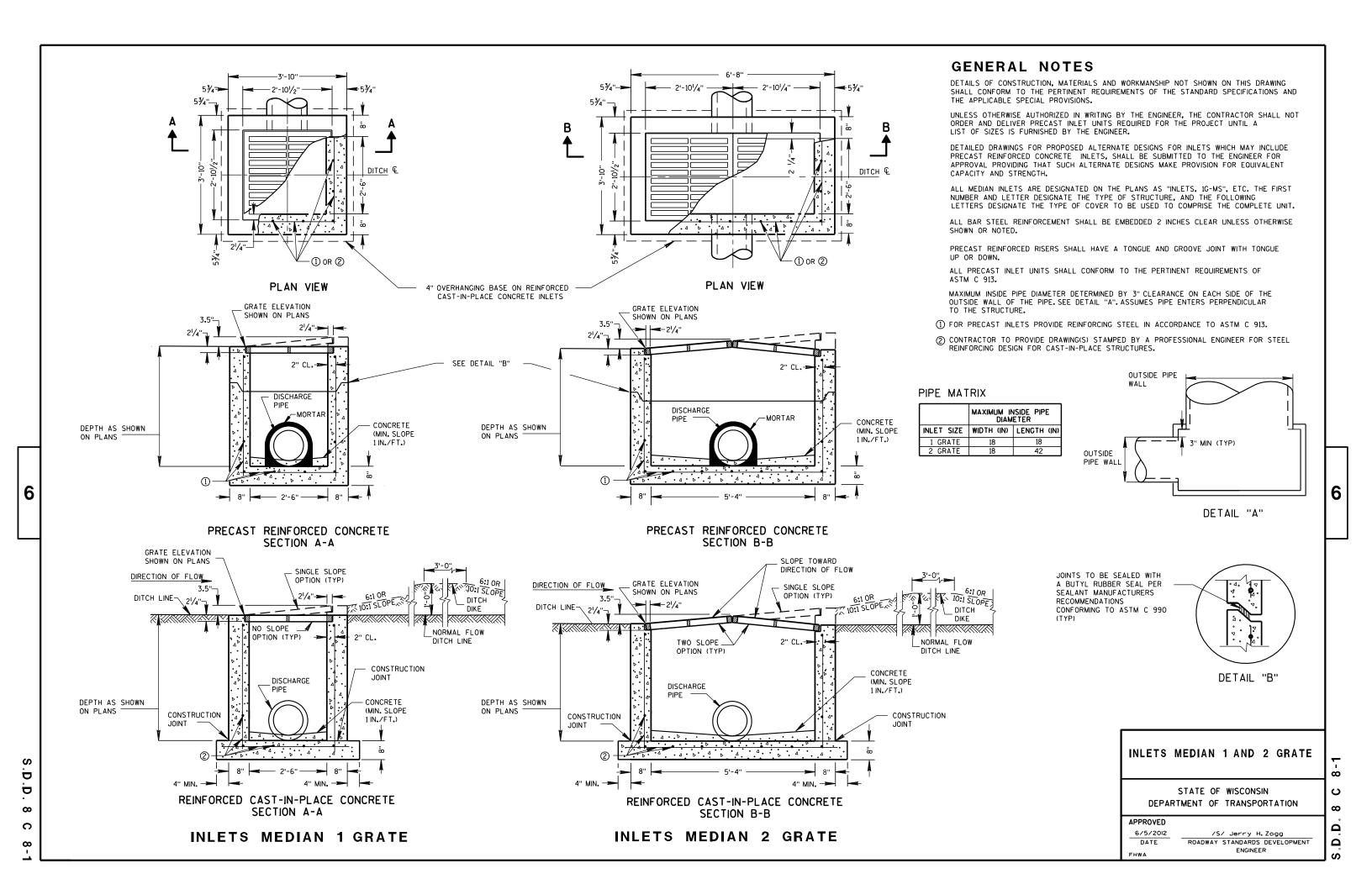
DATE ROADWAY STANDARDS DEVELOPMENT

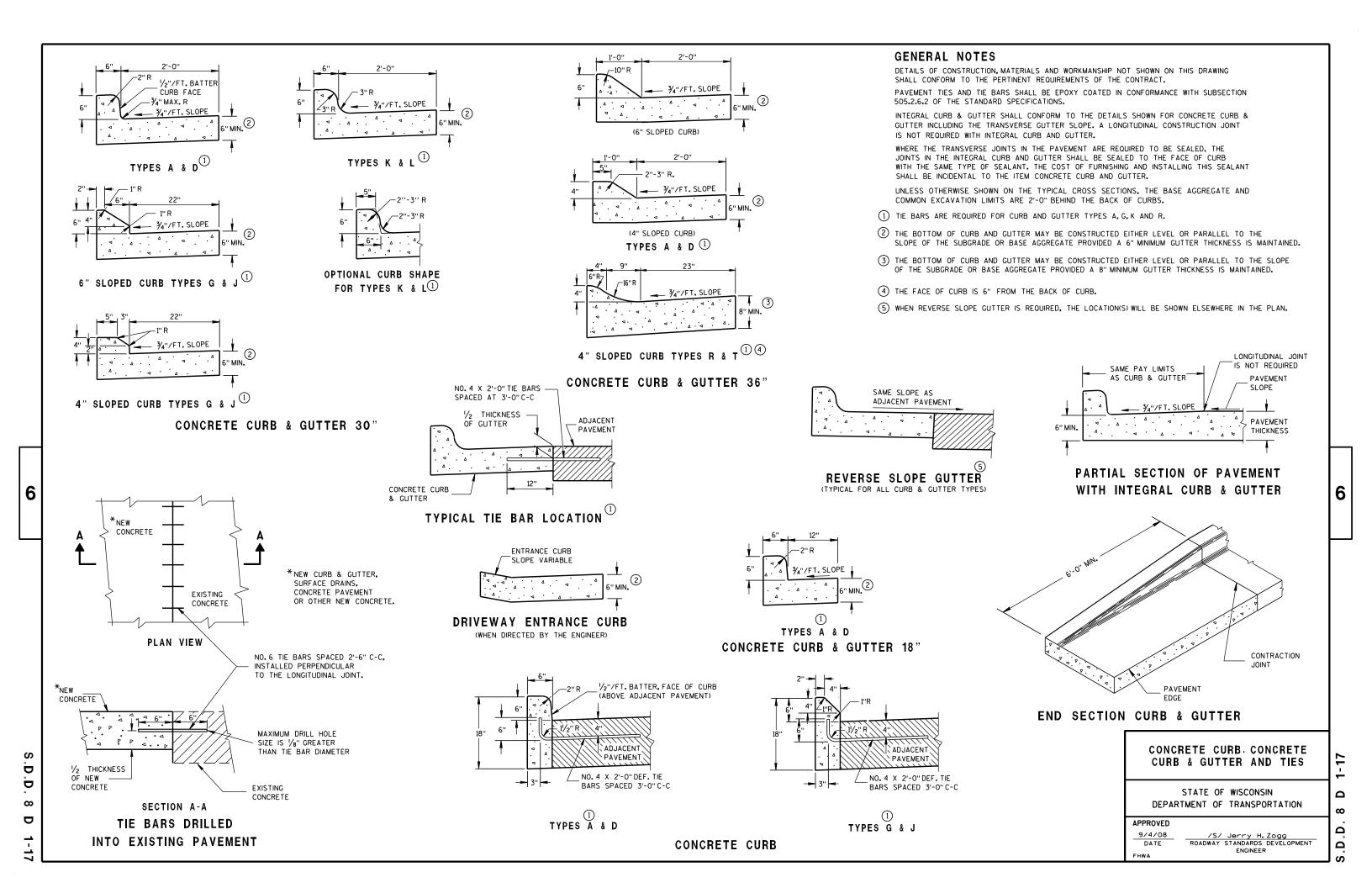
FHWA ENGINEER

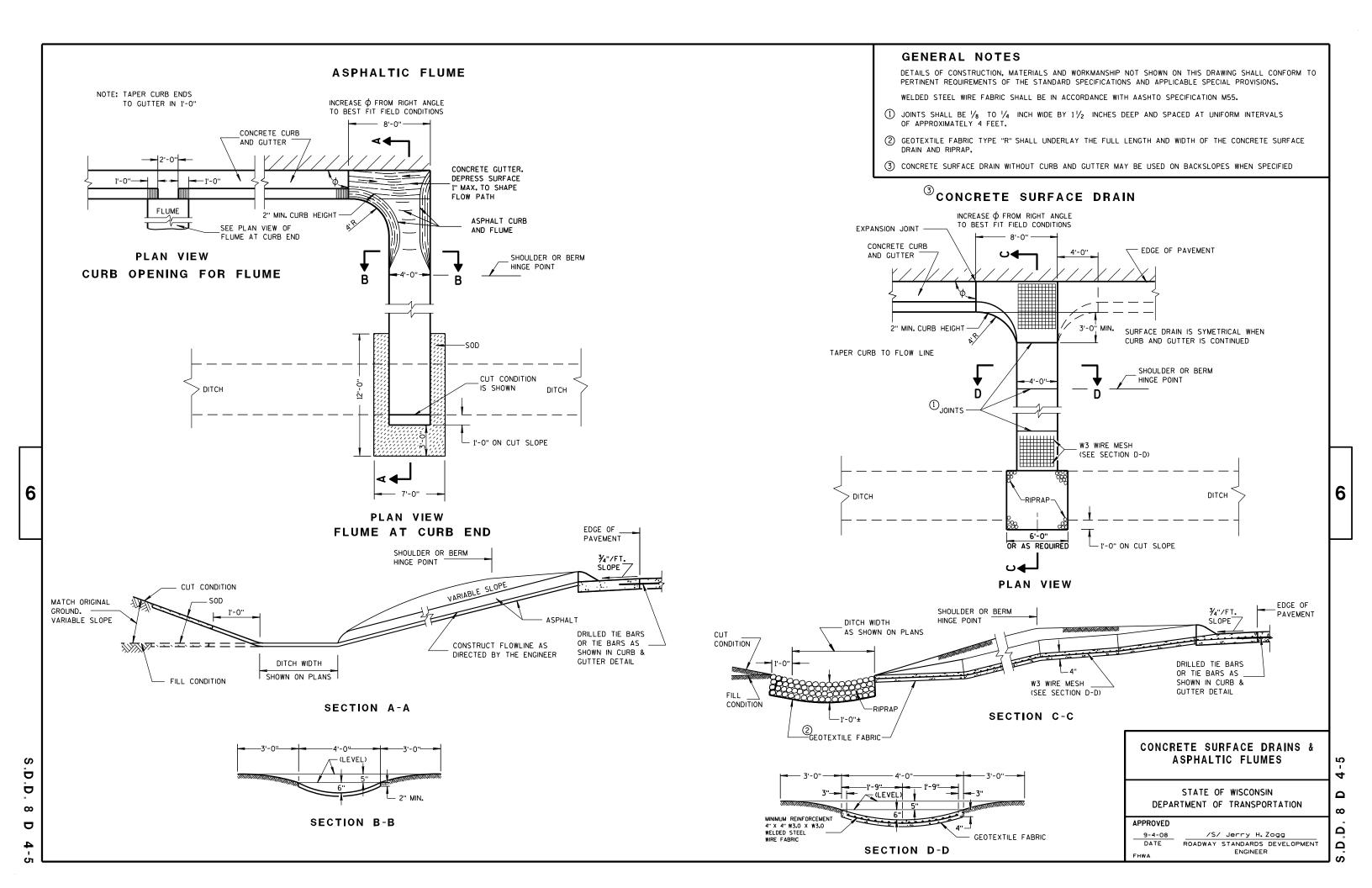
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

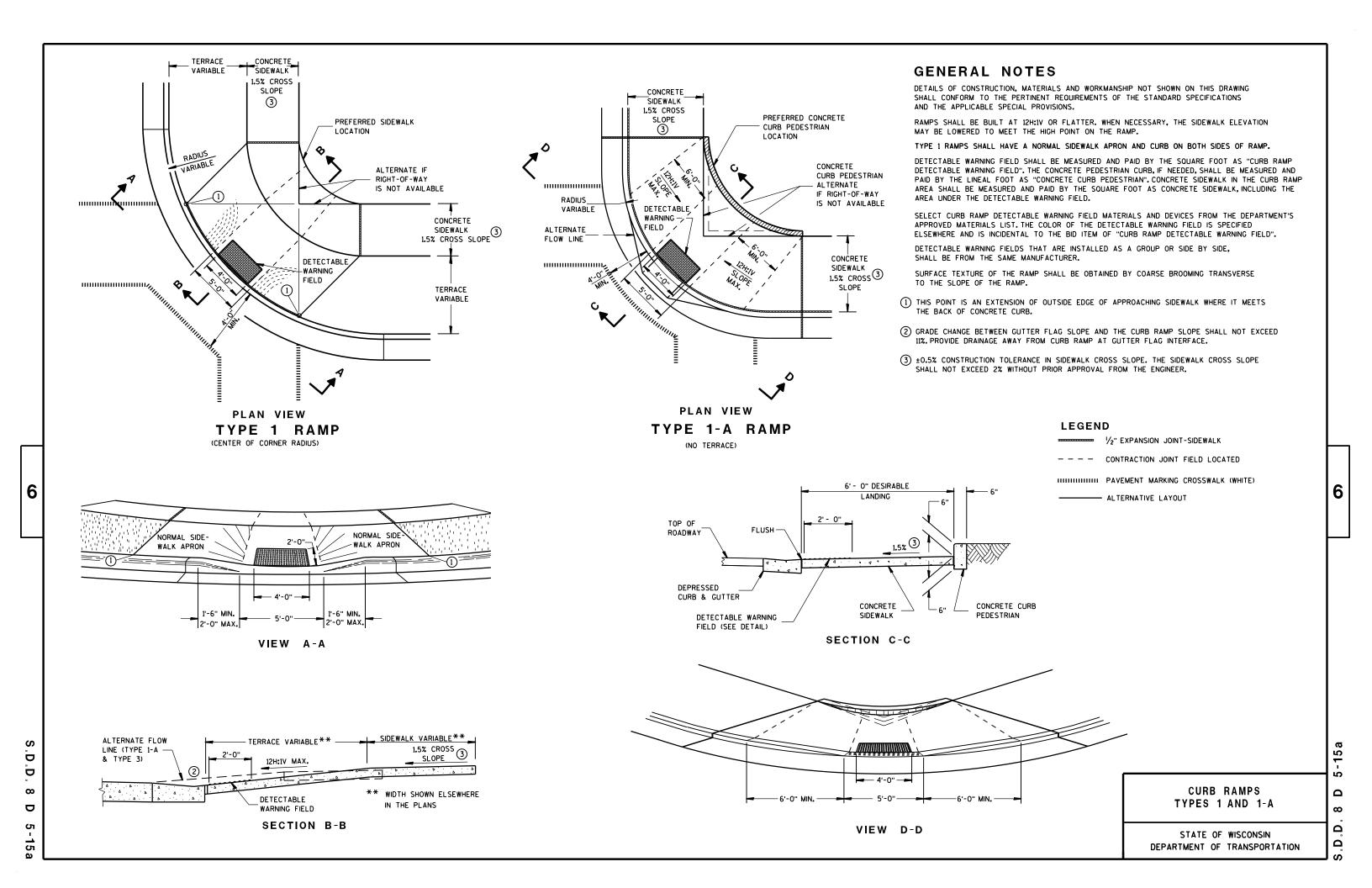
SEPERATE PRECAST REINFORCED

CONCRETE BASE OPTION



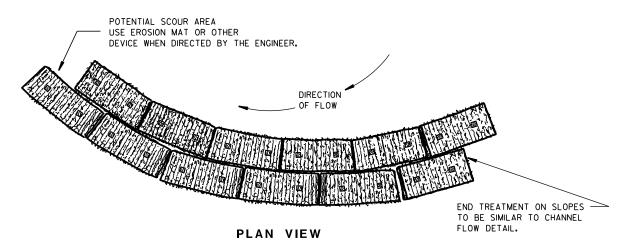




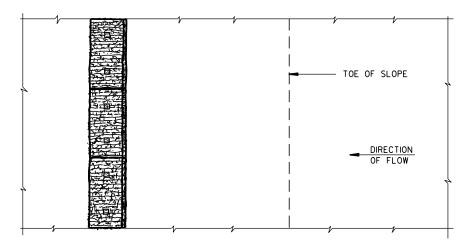


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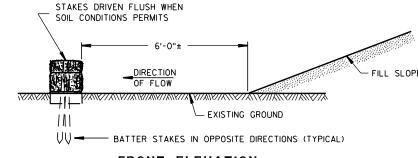
TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.



WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF **EROSION BALES / TEMPORARY** DITCH CHECKS

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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 /S/ Beth Connestro
CHIEF ROADWAY DEVELOPMENT ENGINEER

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TYPICAL APPLICATION OF SILT FENCE

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PLAN VIEW SILT FENCE AT MEDIAN SURFACE DRAINS



GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- 2 FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- 3 WOOD POSTS SHALL BE A MINIMUM SIZE OF 11/8" X 11/8" OF OAK OR HICKORY.
- 4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- (5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



SILT FENCE

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INLET PROTECTION, TYPE A

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 1) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- (2) FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- (3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE, THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION TYPE A, B, C, AND D

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

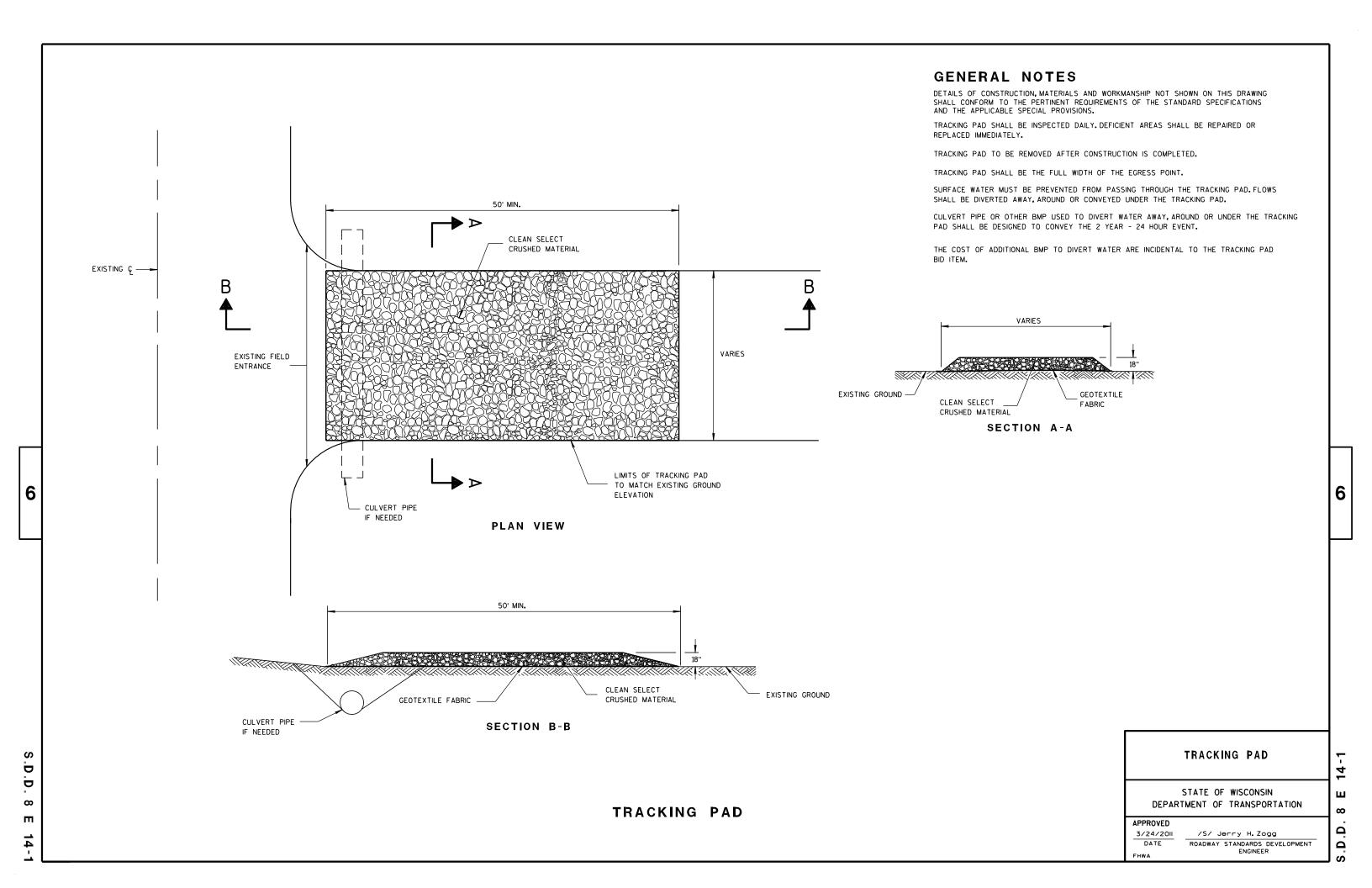
10/16/02

/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER 6

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			ı	METAL	APR	ON EN	NDWAL	LS			
PIPE	MIN. 1	THICK.			DIMENS	SIONS (II	nches)			APPROX.	
DIA.			A	В	Н	L	L Li		W	SLOPE	BODY
(IN.)	STEEL	ALUM.	(±]")	(MAX.)	(±]")	(±1½")	①	0	(±2")		
12	.064	.060	6	6	6	21	12	171/2	24	21/2+o 1	1Pc.
15	.064	.060	7	8	6	26	14	213/4	30	2½+o 1	1Pc.
18	.064	.060	8	10	6	31	15	281/4	36	2½+o 1	1Pc.
21	.064	.060	9	12	6	36	18	29%	42	21/2+o 1	1Pc.
24	.064	. 075	10	13	6	41	18	371/4	48	$2\frac{1}{2}$ to 1	1Pc.
30	.079	. 075	12	16	8	51	18	521/4	60	$2\frac{1}{2}$ to 1	1Pc.
36	.079	. 105	14	19	9	60	24	59¾	72	$2\frac{1}{2}$ to 1	2 Pc.
42	.109	. 105	16	22	11	69	24	75%	84	$2\frac{1}{2}$ to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 ¹ / ₄ +o 1	3 Pc.
54	.109	. 105	18	30	12	84	30	851/2	102	21/4+0 1	3 Pc.
60	.109×	.105×	18	33	12	87	_		114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	_	_	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	_	_	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	_	_	132	11/2+0 1	3 Pc.
84	.109×		18	45	12	87	_	_	138	1/2+0 1	3 Pc.
90	.109×	.105×	18	37	12	87	_	_	144	11/2+0 1	3 Pc.
96	.109×	.105×	18	35	12	87	_		150	11/2+0 1	3 Pc.

* EXCEPT CENTER PANEL

SEE GENERAL NOTES

PLAN VIEW

END VIEW

SIDE ELEVATION

METAL ENDWALLS

SHOULDER

SLOPE

	RE	INFORC	ED C	ONCRET	E APRO	N E	NDWAL	.LS
PIPE		DIMENSIONS (Inches)						
DIA.	Т	A	В	С	D	E	G	APPROX. SLOPE
12	2	4	24	48 1/8	721/8	24	2	3 to 1
15	21/4	6	27	46	73	30	21/4	3 to 1
18	$2\frac{1}{2}$	9	27	46	73	36	21/2	3 to 1
21	23/4	9	36	371/2	731/2	42	23/4	3 to 1
24	3	91/2	431/2	30	731/2	48	3	3 to 1
27	31/4	101/2	$49^{1/2}$	24	731/2	54	31/4	3 to 1
30	31/2	12	54	193⁄4	731/2	60	31/2	3 to 1
36	4	15	63	34¾	97¾	72	4	3 to 1
42	$4\frac{1}{2}$	21	63	35	98	78	41/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	51/2		65	* ** 33 ¹ / ₄ -35	* 98 ¹ / ₄ - 100	90	51/2	2% to 1
60	6	* ** 30-35	60	39	99	96	5	2 to 1
66	61/2		* ** 72-78	* * * 21-27	99	102	51/2	2 to 1
72	7	* ** 24-36	78	21	99	108	6	2 to 1
78	71/2	* ** 24-36	78	21	99	114	61/2	2 to 1
84	8	36	901/2	21	1111/2	120	61/2	11/2+0 1
90	81/2	41	871/2	24	1111/2	132	61/2	11/2+0 1

*MINIMUM

PLAN

END VIEW

END SECTION

GROOVED END ON OUTLET END SECTION TONGUE END ON INLET END SECTION

BAR OR STEEL FABRIC

REINFORCEMENT

LONGITUDINAL SECTION

CONCRETE ENDWALLS

OPTIONAL

1 1/2" R

CULVERT

MEASURED LENGTH

OF CULVERT (TO-

NEAREST FOOT)

DESIGN

REINFORCED

SECTION A-A)

END CORNER PLATES MAY

BE FASTENED TO APRON

THE SURFACES TIGHTLY

TOGETHER

PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD

TOE PLATE (SAME THICKNESS

AND METAL AS APRON) SHALL

BE FURNISHED WHEN CALLED

FOR ON THE PLANS

FDGE (SFE

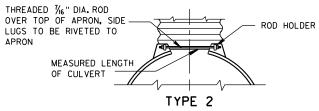
END SECTION CONNECTOR STRAP LUG

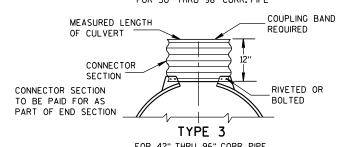
1" WIDE, 12 GA. (0.109"

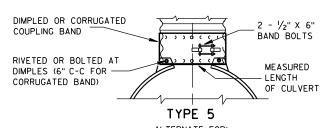
THICK) GALVANIZED STRAP

WITH STANDARD 6" X 1/2" BAND BOLT AND NUT

TYPE 1 FOR 12" THRU 24" CORR. PIPE





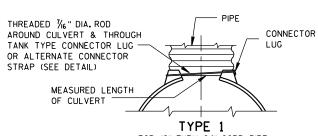


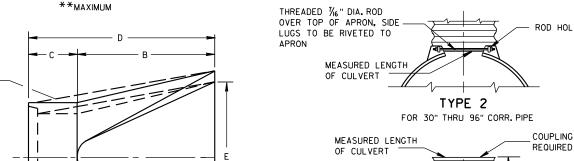
ALTERNATE FOR: ALL SIZES CORRUGATED CIRCULAR PIPE

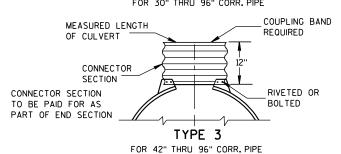
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

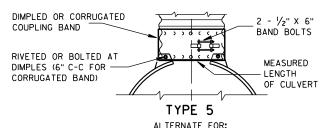
CONNECTION DETAILS 1, 2 OR 5.

ALTERNATE FOR TYPE 1 CONNECTION







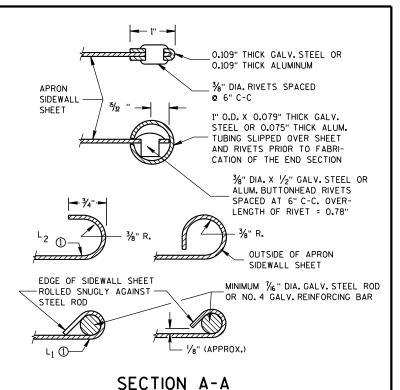


FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5

FOR HELICALLY CORRUGATED PIPE USE ENDWALL

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA, GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES. THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

(1) FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

11/30/94 /S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER

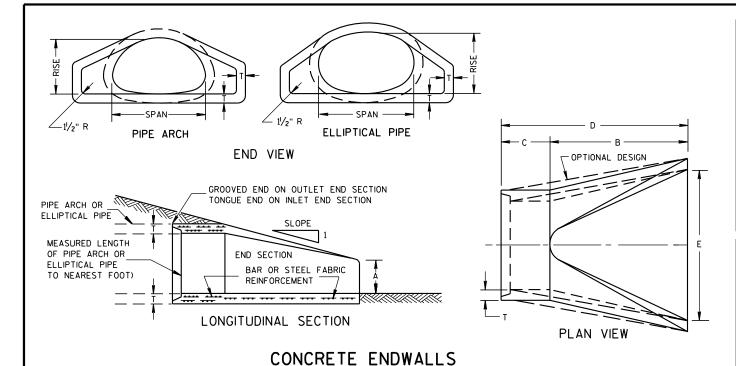
END CORNER

1/16" DIA. HOLES FOR

BOLTS OR RIVETS -

12" C-C MAX. SPACING

Ω



				2-	2/3"	X 1/2"	COR	RUGAT	IONS				
EQUIV. (Inches) MIN. THICK. DIMENSIONS (In					nches)		APPROX.						
DIA.			(Inch		A B		Н	L L	Lı	L ₂	W	SLOPE	BODY
(Inches)	SPAN	RISE	STEEL	ALUM.	(±]")	(MAX.)	(±]")	(±1 ½")	①	1	(±2")	3E0. E	
15	17	13	.064	.060	7	9	6	19	14	16	30	2½+o 1	1Pc.
18	21	15	.064	.060	7	10	6	23	14	193/8	36	21/2+o 1	1Pc.
21	24	18	.064	.060	8	12	6	28	18	213/4	42	21/2+o 1	1Pc.
24	28	20	.064	.060	9	14	6	32	18	271/2	48	21/2+o 1	1Pc.
30	35	24	.079	.075	10	16	6	39	18	375/8	60	21/2+o 1	1Pc.
36	42	29	.079	.075	12	18	8	46	24	45%	75	21/2+o 1	1Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	21/2+o 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	21/2+0 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	723/4	102	21/4+0 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	821/4	114	21/4+0 1	3 Pc.
66	77	52	.109×	.105 *	18	36	12	77	_	_	126	2 to 1	3 Pc.
72	83	57	.109 *	.105*	18	39	12	77	_	_	138	2 to 1	3 Pc.

				3	3" X 1	ı" COR	RUGA	TIONS					
EQUIV. DIA.	(Incl	nes)	MIN. 1		Α	В	DIMENS H	SIONS (I	nches) L1	L ₂	w	APPROX. SLOPE	BODY
(Inches)	SPAN	RISE	STEEL	ALUM.	(±1")	(MAX.)	(±1")	(±1½")		0	(±2")		
48	53	41	.109	.105	18	26	12	63	24	723/4	90	2½+o 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	821/4	102	2 to 1	2 Pc.
60	66	51	.109*	. 105*	18	33	12	77	_	_	114	11/2+0 1	3 Pc.
66	73	55	.109 ×	. 105*	18	36	12	77	_	_	126	11/2+0 1	3 Pc.
72	81	59	.109*	. 105*	18	39	12	77	_	_	138	2 to 1	3 Pc.
78	87	63	.109*	.105 *	22	38	12	77	_	_	148	11/2+0 1	3 Pc.
84	95	67	.109*	. 105*	22	34	12	77	_	_	162	11/2+0 1	3 Pc.
90	103	71	.109 *	. 105*	22	38	12	77	_	_	174	1½+o 1	3 Pc.
96	112	75	.109*	. 105*	24	40	12	77	_	_	174	1/2+0 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

THREADED 7/6" DIA. ROD OVER TOP OF APRON, SIDE

LUGS TO BE RIVETED TO

MEASURED LENGTH OF PIPE ARCH

MEASURED LENGTH

OF PIPE ARCH

SECTION

CONNECTOR SECTION

TO BE PAID FOR AS

PART OF END SECTION

CONNECTOR

* EXCEPT CENTER PANEL SEE GENERAL NOTES

ROD HOLDER

COUPLING BAND

REQUIRED

RIVETED OR

BOLTED

	REINFORCED CONCRETE PIPE ARCH									
EQUIV.		DIMENSIONS (Inches)								
DIA. (Inches)	** SPAN	** RISE	T	A	В	С	D	E	APPROX. SLOPE	
24	29	18	3	81/2	39	33	72	48	3 to 1	
30	36	22	31/2	91/2	50	46	96	60	3 to 1	
36	44	27	4	111/8	60	36	96	72	3 to 1	
42	51	31	41/2	1513/16	60	36	96	78	3 to 1	
48	58	36	5	21	60	36	96	84	3 to 1	
54	65	40	51/2	251/2	60	36	96	90	3 to 1	
60	73	45	6	31	60	36	96	96	3 to 1	
72	88	54	7	31	60	39	99	120	2 to 1	
84	102	62	8	281/2	83	19	102	144	2 to 1	

	REI	NFORC	ED C	ONCR	ETE E	LLIPT	ICAL	PIPE				
EQUIV.		DIMENSIONS (Inches)										
DIA. (Inches)	** SPAN	** RISE	T	A	В	С	D	Ε	APPROX. SLOPE			
24	30	19	31/4	81/2	39	33	72	48	3 to 1			
30	38	24	3¾	91/2	54	18	72	60	3 to 1			
36	45	29	41/2	111/8	60	24	84	72	21/2+o 1			
42	53	34	5	15¾	60	36	96	78	21/2+o 1			
48	60	38	51/2	21	60	36	96	84	2½+o 1			
54	68	43	6	251/2	60	36	96	90	2½+o 1			
60	76	48	61/2	30	60	36	96	96	2½+o 1			

**NOMINAL SIZE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

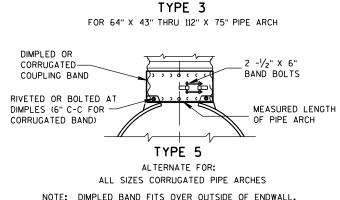
CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA, GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

(1) FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.



TYPE 2

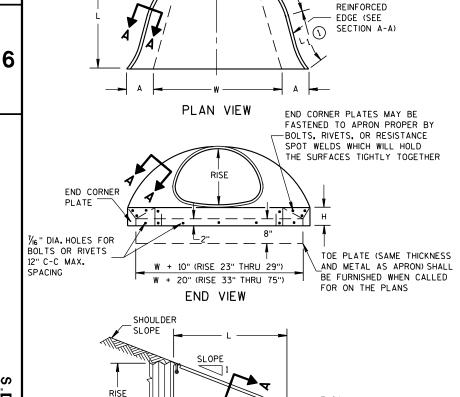
FOR 17" X 13" THRU 112" X 75" PIPE ARCH

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL.

APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED	
11/30/94	/S/ Rory L. Rhinesmith
DATE	CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



SIDE ELEVATION

METAL ENDWALLS

D

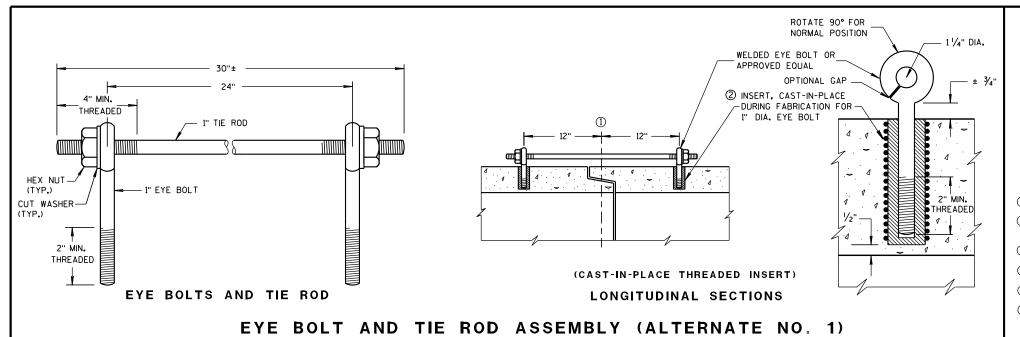
FLOW

0.109" THICK GALV. STEEL OR 0.109" THICK ALUMINUM 3/8" DIA. RIVETS SPACED APRON SIDEWALL -AT 6" C-C SHEET 1" O.D. X O.079" THICK GALV. STEEL OR 0.075" THICK ALUM. TUBING SLIPPED OVER SHEET AND RIVETS PRIOR TO FABRI-CATION OF THE END SECTION 38" DIA. X 1/2" - GALV. STEEL OR ALUM. BUTTONHEAD RIVETS SPACED AT 6" C-C. OVER-LENGTH OF RIVET = 0.78" OUTSIDE OF APRON SIDEWALL SHEET EDGE OF SIDEWALL SHEET MINIMUM 7/6" DIA. GALV. -ROLLED SNUGLY AGAINST STEEL ROD OR 10M STEEL ROD GALV. REINFORCING BAR

SECTION A-A

— 1/8" (APPROX.)

CONNECTION DETAILS



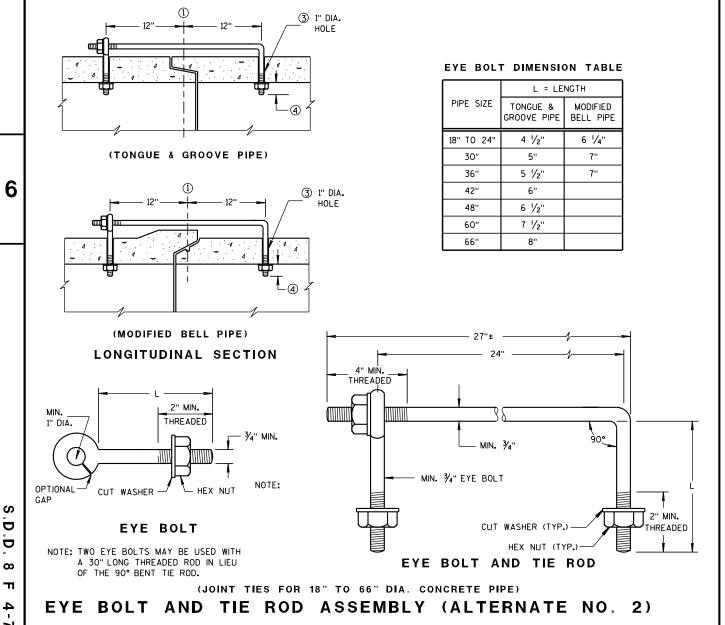
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES, ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

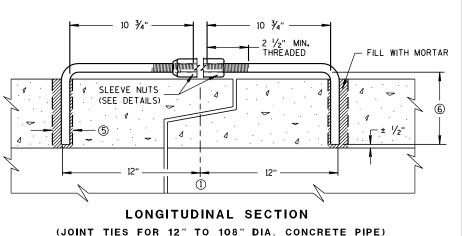
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- (1) & OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE
- ${\mathfrak S}$ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ${\mathfrak L}$ OF TONGUE AND GROOVE.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- (5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- ⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN $rac{1}{2}$ INCH OF THE INNER SURFACE OF THE PIPE.

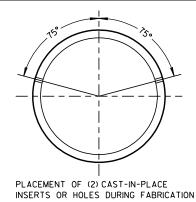


D

ADJUSTABLE TIE ROD TABLE 5/8 5 12-60 3/4 5 1/2 3/4 90-108 DIMENSIONS SHOWN ARE IN INCHES **TAPERED** PLAIN RIGHT AND LEFT THREADS **SLEEVE NUTS** 2 1/2" MIN. THREADED

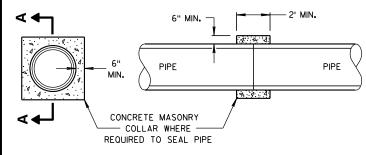


ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

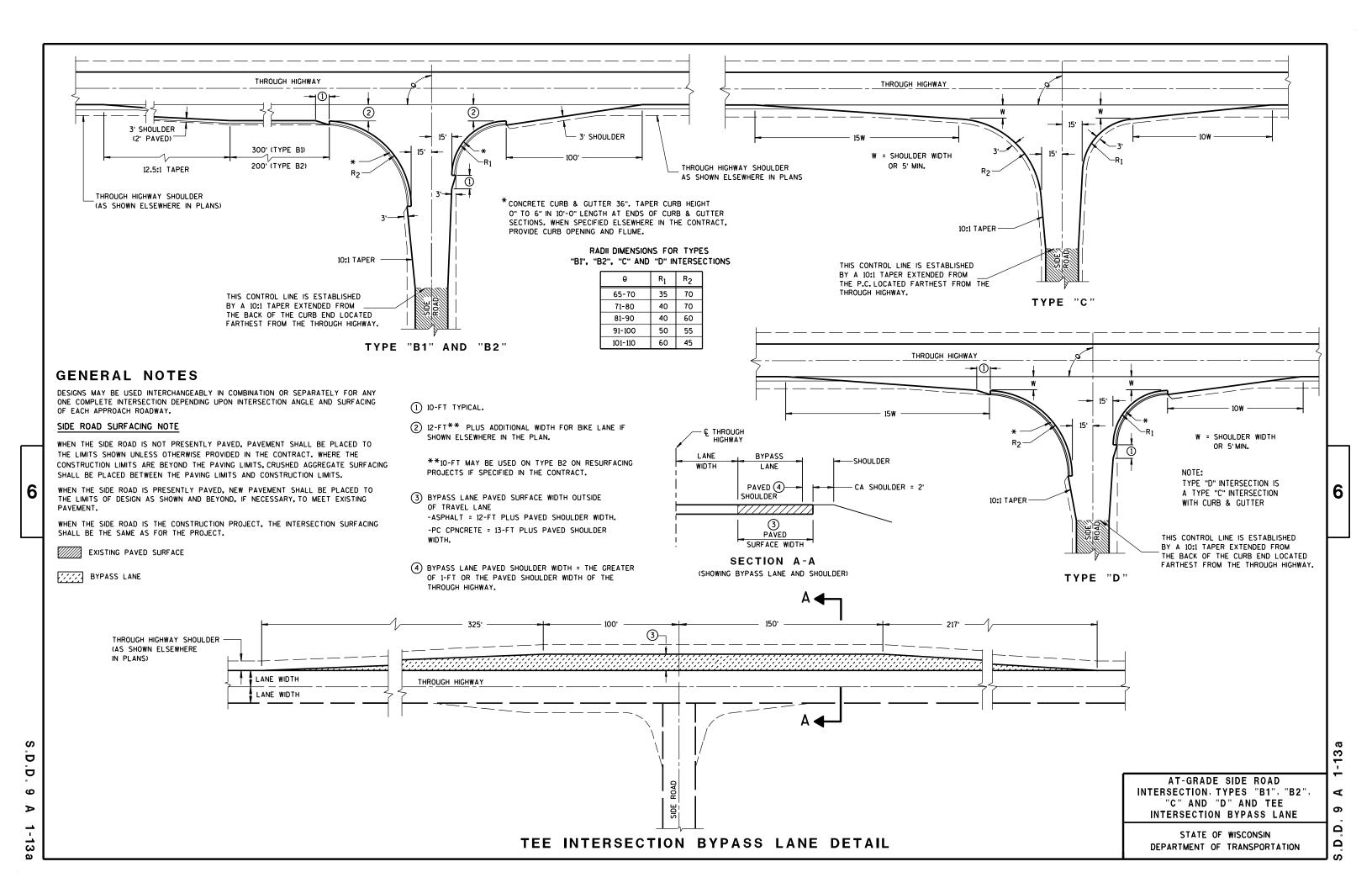
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

6/5/2012 /S/ Jerry H. Zogg DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER

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SEE DETAIL "A" PAVEMENT SURFACE

SAWED JOINT

GENERAL NOTES

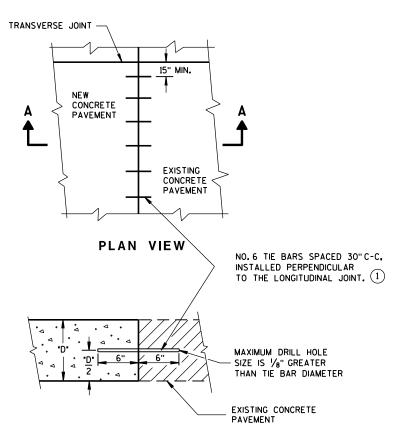
DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

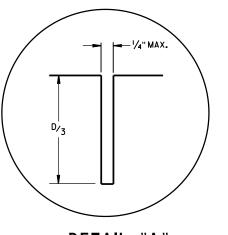
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

1 ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

CONSTRUCTION JOINT



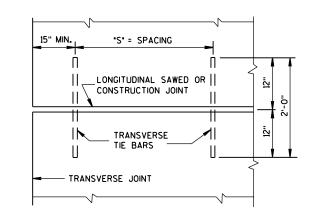
SECTION A-A LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER	MAXIMUM TI SPACING PAVEMENT 24' OR 26'	
6, 6 1/2"	3"± ¹ / ₂ "	48"	42"
7, 7 1/2"	3 ¼"±1"	45"	36"
8, 8 1/2"	3 ¾"±1"	39"	30"
9, 9 ½"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 ¾"±1"	30"	24"
11, 11 ½"	5 ¼"±1"	27"	21"
12"	5 ¾"±1"	24"	21"



PLAN VIEW SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT				
LONGITUDINAL	JOINTS	AND	TIES	

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013 DATE /S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER FHWA

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b

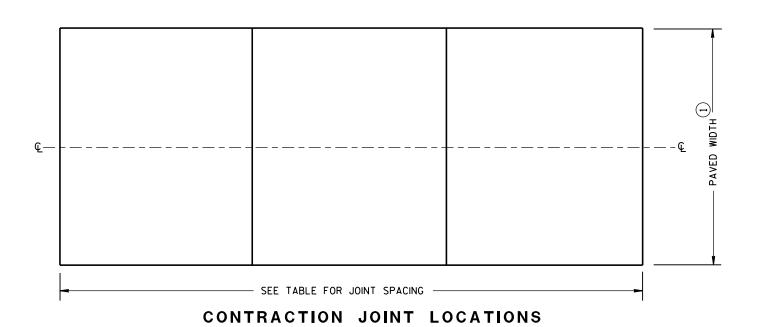
D

C

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'

SEE JOINT DETAIL D = PAVEMENT DEPTH DEPTH CONTRACTION JOINT



GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

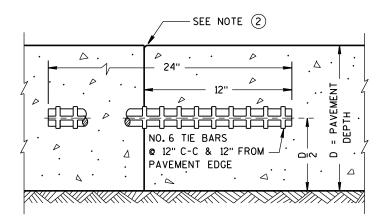
CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

FORM OR SAW CONSTRUCTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

- (1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.
- 2 PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.



TIED TRANSVERSE CONSTRUCTION JOINT

URBAN NON-DOWELED CONCRETE PAVEMENT

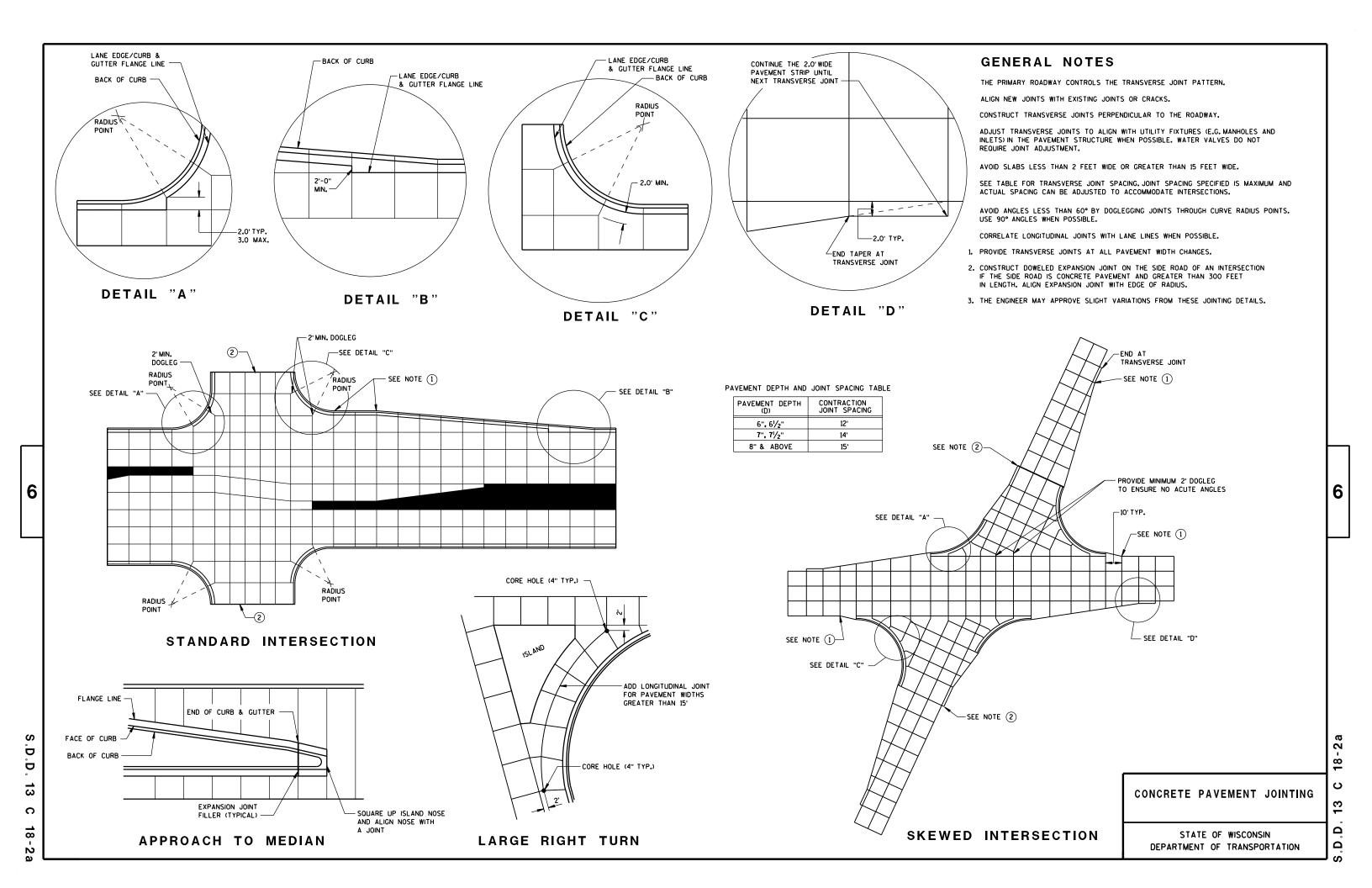
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

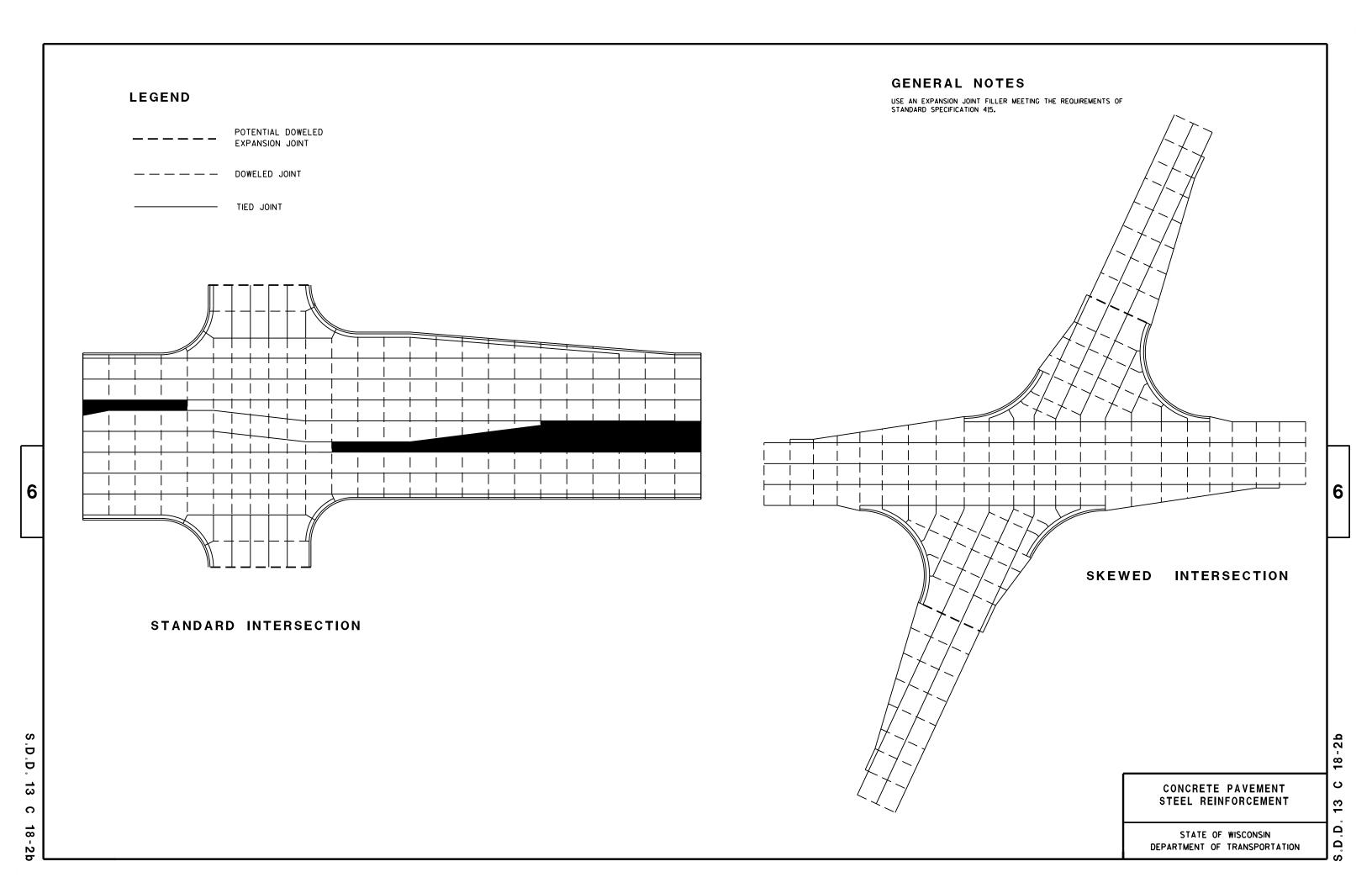
APPROVED

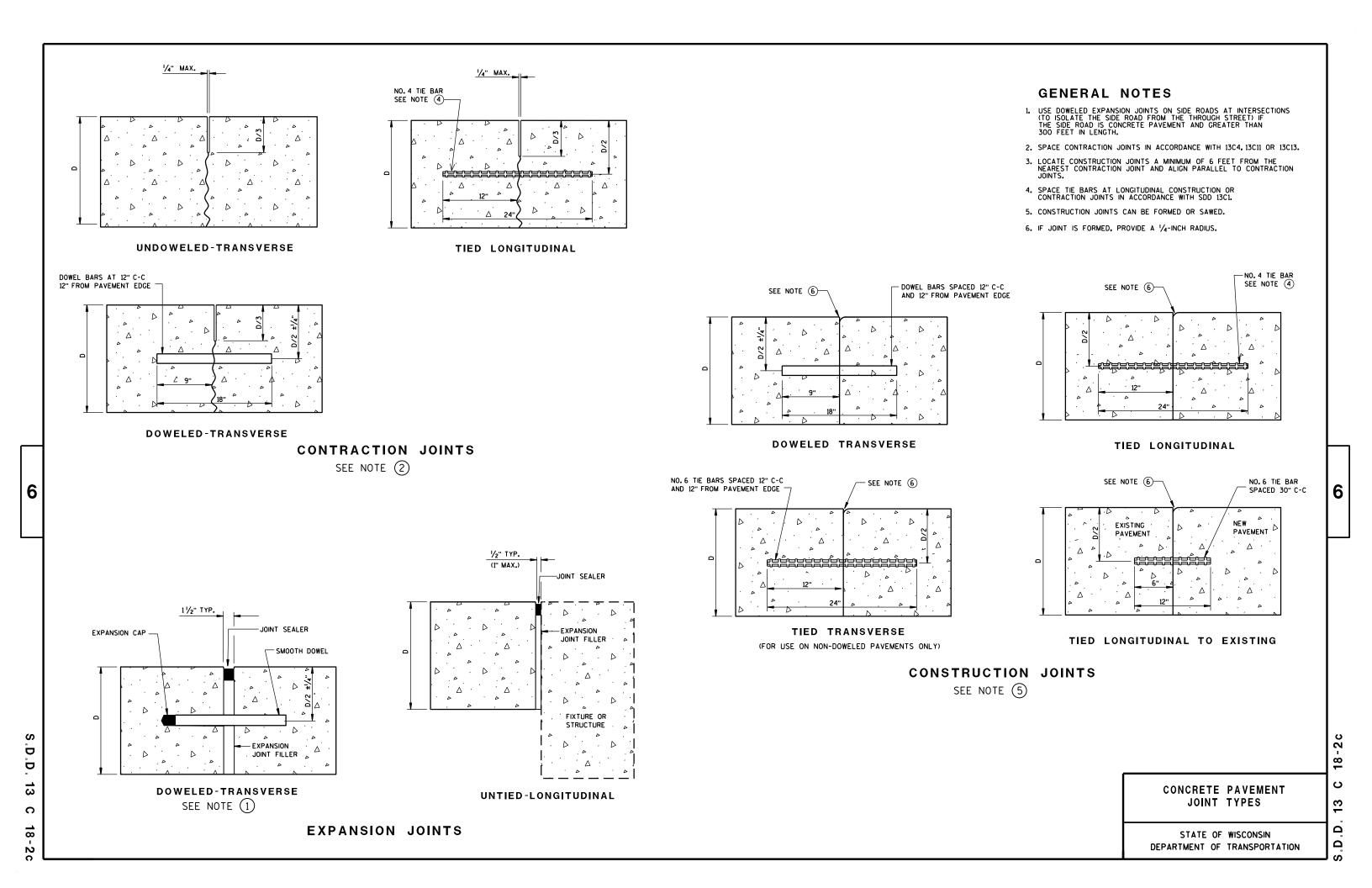
5/3/2013
DATE
PAVEMENT POLICY & DESIGN ENGINEER

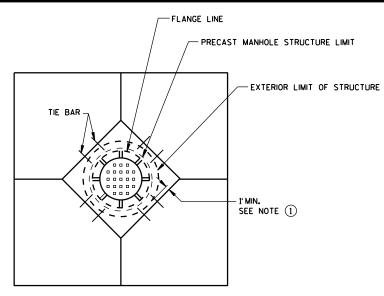
FHWA

S.D.D. 13

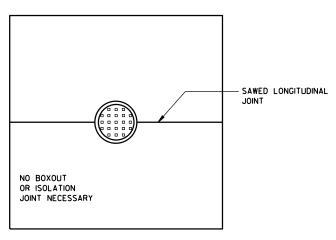




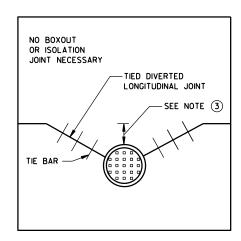




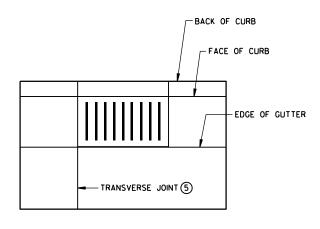
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



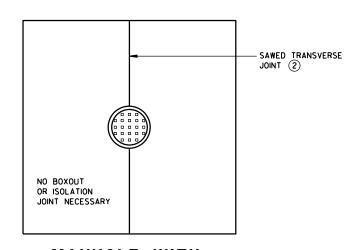
MANHOLE WITH LONGITUDINAL JOINT



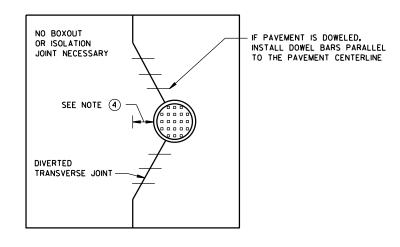
MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



INLET WITH TRANSVERSE JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- 2 ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- (3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- (4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- (5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT
JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER

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BRIDGE ROAD 1)TWO-WAY **CLOSED** TYPE "A" WARNING LIGHTS REQUIRED OUTSIDE EDGE OF SHOULDER OUTSIDE EDGE OF SHOULDER OR FACE OF CURB OR FACE OF CURB **DETAIL D**

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30". R11-3, R11-4 AND R10-61 SHALL BE 60" X 30". M4-9 SHALL BE 30" X 24". M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.) M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.) MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.) D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS. R1-1 SHALL BE 36" X 36".

- (1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS. PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN

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THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
RI1-2 SHALL BE 48" X 30".
RI1-4 AND RI1-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

SIGN ON PERMANENT SUPPORT

TYPE III BARRICADE

TYPE III BARRICADE WITH
ATTACHED SIGN

(A) TYPE "A" WARNING LIGHT (FLASHING)

//// w

WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes

DATE STATE TRAFFIC ENGINEER OF DESIGN

S.D.D. 15 C 3-2

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

6

S

D

15

C

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

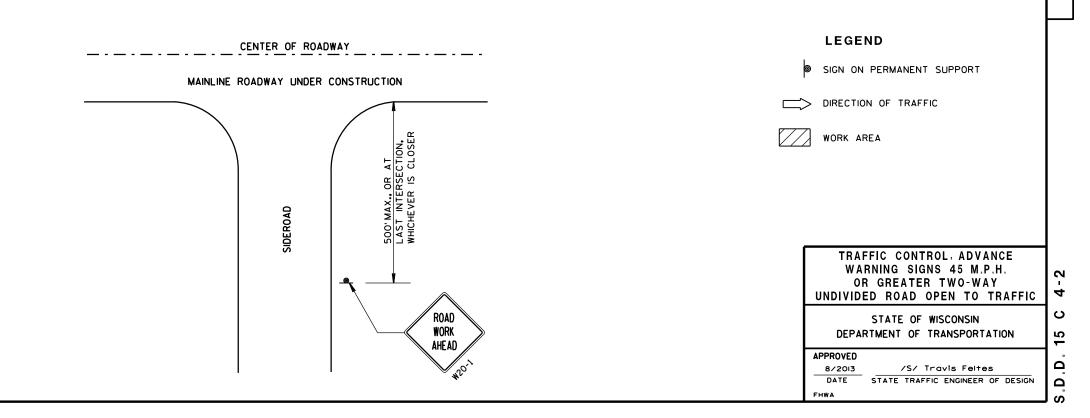
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- * PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

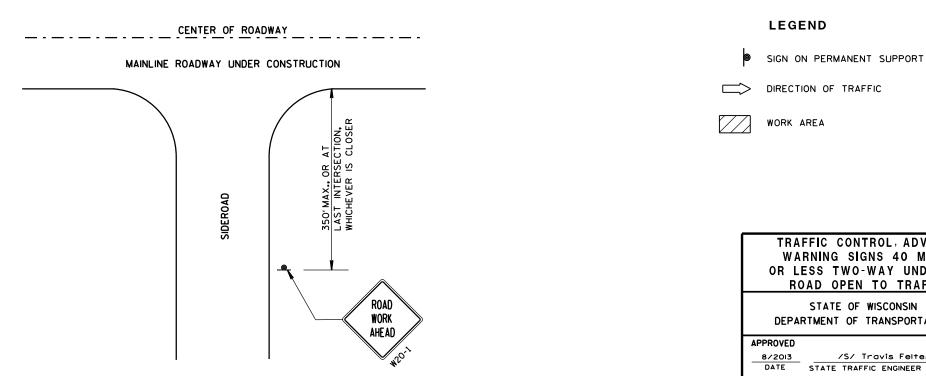
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48"

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN

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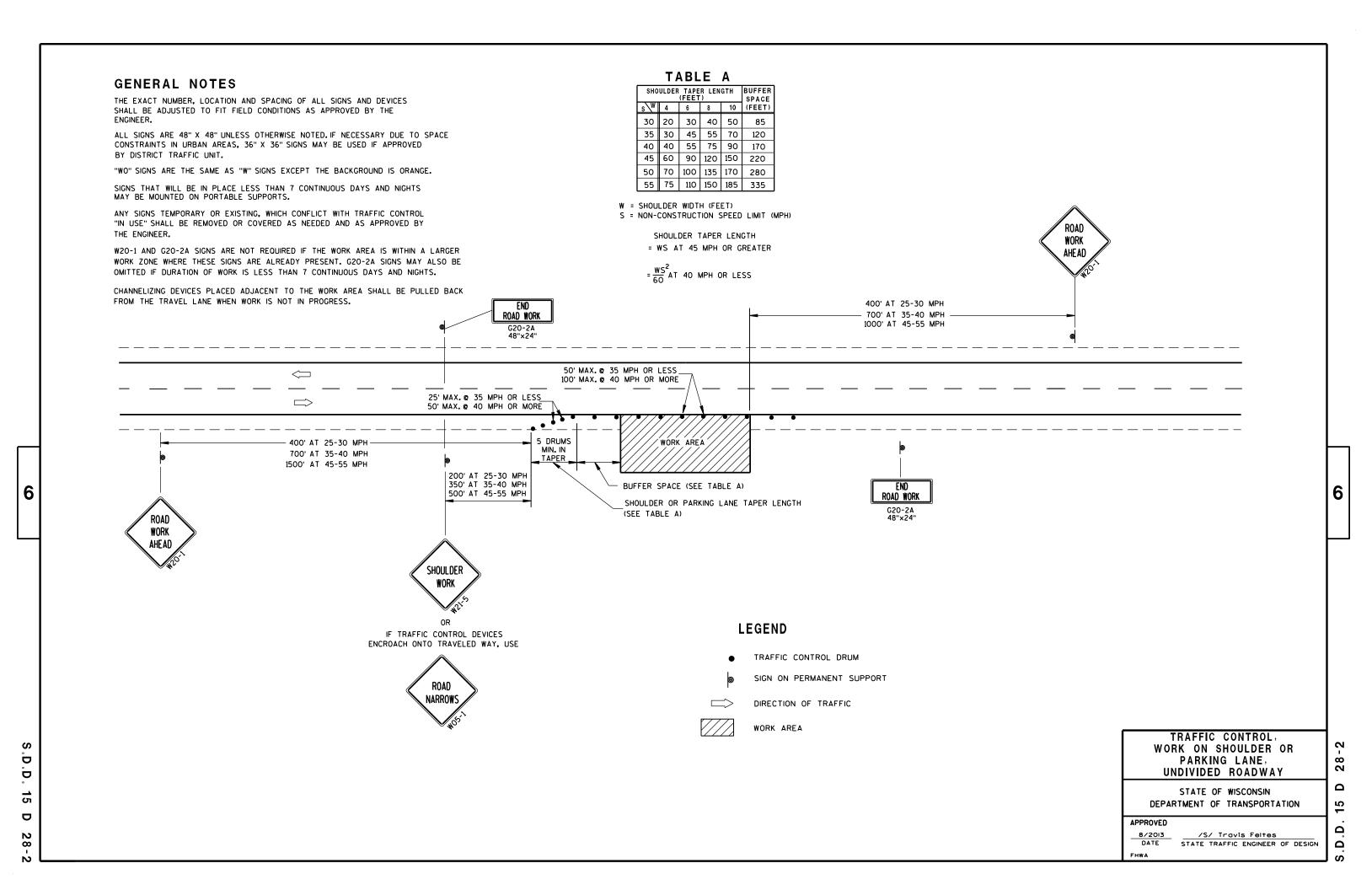
6

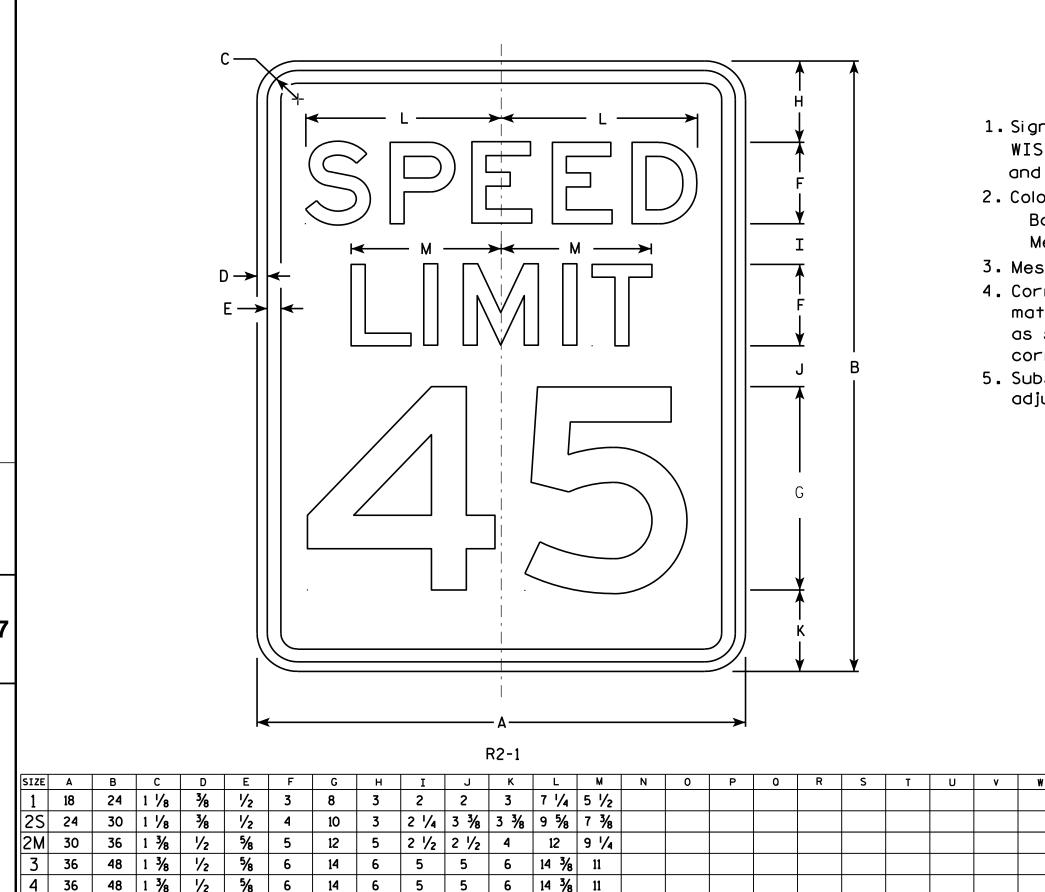
D Ö 15 C











4 1/2 6 3/4 6 3/4 19 1/4 14 5/8

COUNTY:

20

HWY:

6

NOTES

- 1. Sign is Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - White Message - Black

- 3. Message Series E
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal. the corners and borders shall be rounded.
- 5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matther R Raus For State Traffic Engineer

DATE <u>5/26/1</u>0 PLATE NO. R2-1.13

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN

2 1/4

5

48

PROJECT NO:

60

PLOT DATE: 28-MAY-2010 08:32

PLOT BY: ditjph

3.0

5.0

7.5

12.0

12.0

20.0

PLOT NAME :

PLOT SCALE: 4.717577:1.000000

WISDOT/CADDS SHEET 42

urban area

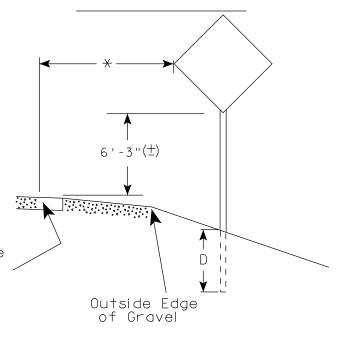
2' Min - 4' Max (See Note 6)

7'-3"(±)

** Curb Flowline

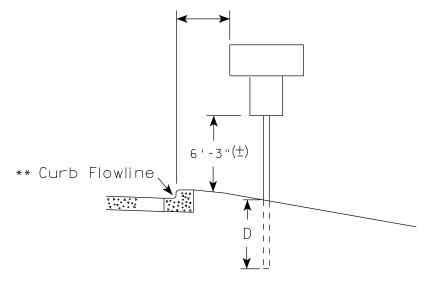
White Edgeline Location

RURAL AREA (See Note 2)



2' Min - 4' Max (See Note 6)

 \Box



White Edgeline
Location

Outside Edge
of Gravel

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

PLOT BY : msc i9h

GENERAL NOTES

- 1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
- 2. If signs are mounted on barrier wall, see A4-10 sign plate.
- 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
- 4. Minimum mounting height for J assemblies (A4-5) is 7'-3'' (\pm) or 6'-3'' (\pm) per urban or rural detail respectively.
- 5. Minimum mounting height for signs mounted on traffic signal poles is $5' 3''(\underline{+})$.
- 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 7. The (\pm) tolerance for mounting height is 3 inches.
- 8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (+) or as directed by the Engineer.
- 9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

Area of Sign	
Installation	D
(Sq. Ft.)	(Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

PLOT SCALE: 101.222696:1.000000

Matther R Raud

DATE <u>5/24/2013</u>

PLATE NO. <u>A4-3.17</u>

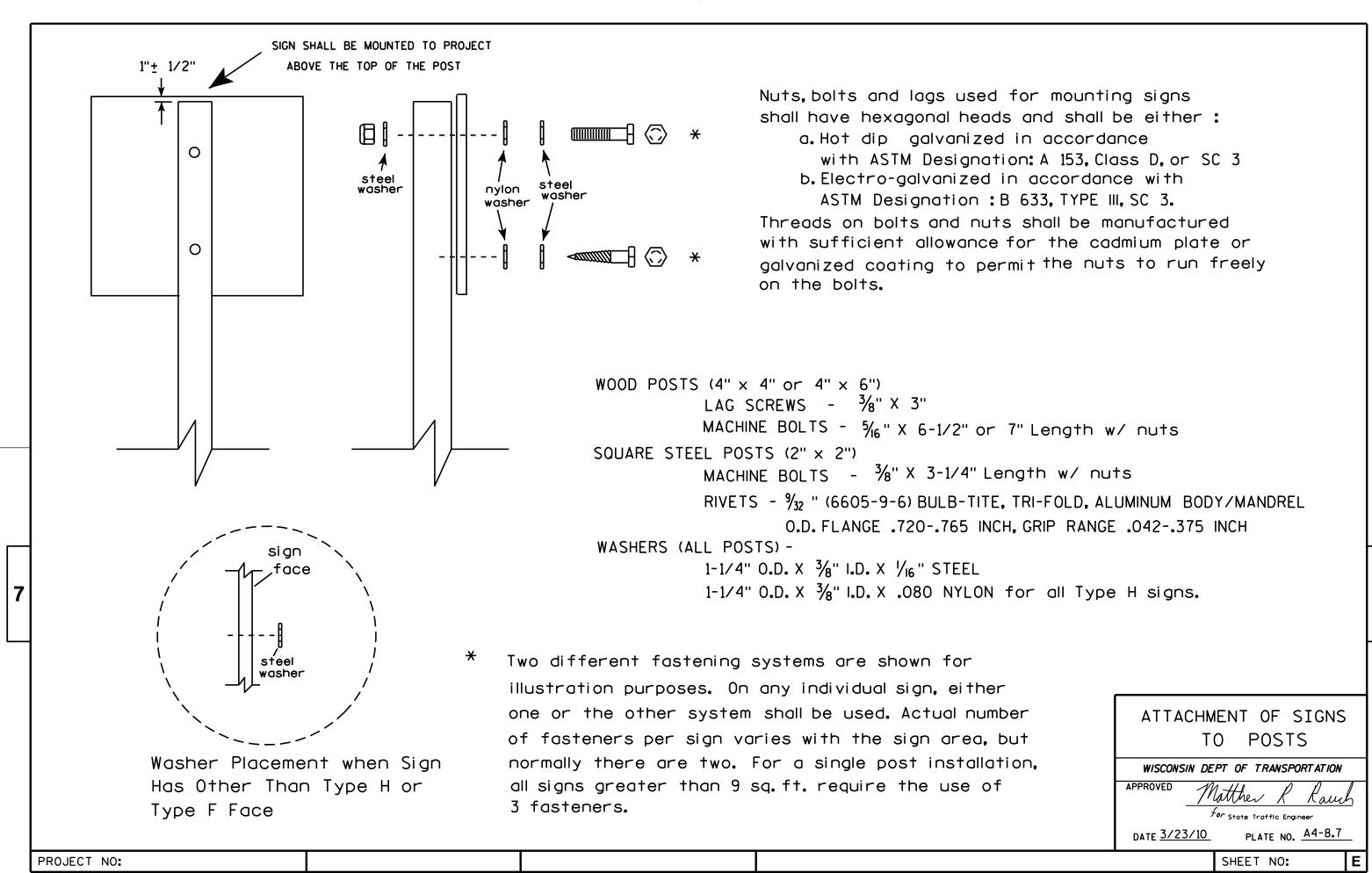
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

measured from the flow line.



AREA	(SF)				I NCREMENTAL VO	OLUME (CY) (UN	IADJUSTED)		CUMULATI VE VO	LUME (CY)				
	. ,					,,,,,	,							
									0.17	EXPANDED	MARSH	MARSH		
ON CU	IT	FILL	MARSH EXCAVATI ON	MARSH DI SPOSAL	CUT	FILL	MARSH EXCAVATI ON	MARSH DI SPOSAL	CUT 1. 0	FI LL 1. 3	EXCAVATI ON 1. 0	DI SPOSAL 1. 0	MASS ORDI NATE	REMARKS
JIV CO) [FILL	EXCAVATION	DI SPUSAL	COI	FILL	EXCAVATION	DI SPUSAL	1.0	1. 3	1. 0	1.0	URDINATE	REWARKS
46	. 6	7. 0												
50	. 2	9. 2			110	20			110	26			84	
54	. 1	9. 3			100	20			210	52			158	
	. 0	0. 0			110	10			320	65			255	
	. 9	0. 9			130	0			450	65			385	
	. 5	2. 8			150	0			600	65			535	
	. 7 . 7	3. 6 3. 8			160 150	10 10			760 910	78 91			682 819	
	. <i>1</i> . 7	3. o 7. 7			130	10			1040	104			936	
57		11. 2			120	20			1160	130			1030	
	. 0	10. 8			100	20			1260	156			1104	
	. 6	9. 3			100	20			1360	182			1178	
60		8. 2			110	20			1470	208			1262	
	. 5	9. 2			110	20			1580	234			1346	
	. 5	9. 6			110	20			1690	260			1430	
	. 3	9. 6			110	20			1800	286			1514	
	. 8	9. 1			110	20			1910	312			1598	
59	. 1 . 6	16. 5 14. 5			110 110	20 30			2020 2130	338 377			1682 1753	
	. 6 . 6	16.6			110	30			2240	416			1824	
	. 8	16. 3			120	30			2360	455			1905	
	. 0	16. 3			120	30			2480	494			1986	
	. 6	4. 1			120	20			2600	520			2080	
58	. 6	8. 4			120	10			2720	533			2187	
57		6. 8			110	10			2830	546			2284	
	. 2	10. 4			100	20			2930	572			2358	
	. 9	10. 9			100	20			3030	598			2432	
49		9. 6			100	20			3130	624			2506	
	. 8 . 3	12. 5 11. 4			90 80	20 20			3220 3300	650 676			2570 2624	
	. 0	3. 0			80	10			3380	689			2691	
	. 3	14. 8			80	20			3460	715			2745	
	. 8	11. 5			80	20			3540	741			2799	
53	. 9	0. 3			90	10			3630	754			2876	
	. 0	0. 7			100	0			3730	754			2976	
	. 3	13. 3			90	10			3820	767			3053	
	. 7	6. 7			80	20			3900	793			3107	
	. 7	10. 6			80	20			3980	819			3161	
	. 6 . 2	9. 9 0. 8			80 90	20 10			4060 4150	845 858			3215 3292	
) 43		3. 9			90	0			4240	858			3382	
	. 3	6. 5			70	10			4310	871			3439	
	. 0	10. 2			60	20			4370	897			3473	
) 26	. 7	7. 3			50	20			4420	923			3497	
	. 6	7. 7			40	10			4460	936			3524	
27		8. 7			50	20			4510	962			3548	
22		9.8			50	20			4560	988			3572	
38	. u	17.7			/0	20			4/20	1055			3007	
			STA	AGE 1 SUBTOTAL	4720	810	0	0	•				3667	WASTE
21 32			10. 7 3. 4 17. 7	10. 7 3. 4 17. 7	10. 7 3. 4 17. 7	10. 7 3. 4 50 70	10. 7 40 20 3. 4 50 10 17. 7 70 20	10. 7 40 20 3. 4 50 10 17. 7 70 20	10. 7 40 20 3. 4 50 10 17. 7 70 20	10. 7 40 20 4600 3. 4 50 10 4650 17. 7 70 20 4720	10. 7 40 20 4600 1014 3. 4 50 10 4650 1027 17. 7 70 20 4720 1053	10. 7 40 20 4600 1014 3. 4 50 10 4650 1027 17. 7 70 20 4720 1053	10. 7 40 20 4600 1014 3. 4 50 10 4650 1027 17. 7 70 20 4720 1053	10. 7 40 20 4600 1014 3586 3. 4 50 10 4650 1027 3623 17. 7 70 20 4720 1053 3667

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TF

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STATE PROJECT NUMBER: 8997-00-30 HWY: LOCAL STREET COUNTY: BARRON WEST AVENUE EARTHWORK SUMMARY SHEET NO:

FILE NAME: G:\2011-proj\11115082\dwg\090101_ew.dwg PLOT DATE: Aug 08, 2013 - 03:27pm PLOT BY:Owner PLOT NAME: EARTHWORK ORG. DATE: Jun 02, 2009 Originator: PLOT SCALE: WISDOT/CADDS SHEET 42

	AREA (SF)				I NCREMENTAL V	OLUME (CY) (UN	ADJUSTED)		CUMULATI VE VO	LUME (CY)				
										EXPANDED	MARSH	MARSH		
			MARSH	MARSH			MARSH	MARSH	CUT	FILL	EXCAVATI ON	DI SPOSAL	MASS	
STATI ON 36+90	CUT 46. 6	FI LL 7. 0	EXCAVATI ON	DI SPOSAL	CUT	FILL	EXCAVATI ON	DI SPOSAL	1. 0	1. 3	1. 0	1.0	ORDI NATE	REMARKS
37+50	50. 2	7. 0 9. 2			110	20			110	26			84	
38+00	54. 1	9. 3			100	20			210	52			158	
38+50	68. 0	0. 0			110	10			320	65			255	
39+00	76. 9	0. 9			130	0			450	65			385	
39+50	85. 5	2. 8			150	0			600	65			535	
40+00	85. 7	3.6			160	10			760	78			682	
40+50	77.7	3.8			150	10			910	91			819	
41+00 41+50	67. 7 57. 1	7. 7 11. 2			130	10 20			1040 1160	104 130			936 1030	
42+00	55. 0	10. 8			120 100	20			1260	156			1104	
42+50	56. 6	9. 3			100	20			1360	182			1178	
43+00	60. 4	8. 2			110	20			1470	208			1262	
43+50	62. 5	9. 2			110	20			1580	234			1346	
44+00	59. 5	9. 6			110	20			1690	260			1430	1
44+50	59. 3	9. 6			110	20			1800	286			1514	
45+00	59. 8	9. 1			110	20			1910	312			1598	
45+50	59. 1	16. 5			110	20			2020	338			1682	1
46+00	57. 6	14. 5			110	30			2130	377			1753	
46+50	61.6	16. 6			110	30			2240	416			1824	
47+00 47+50	62. 8 63. 0	16. 3 16. 3			120 120	30 30			2360 2480	455 4 9 4			1905 1986	
48+00	66. 6	4. 1			120	20			2600	520			2080	
48+50	58. 6	8. 4			120	10			2720	533			2187	
49+00	57. 1	6. 8			110	10			2830	546			2284	
49+50	56. 2	10. 4			100	20			2930	572			2358	
50+00	54. 9	10. 9			100	20			3030	598			2432	
50+50	49. 4	9. 6			100	20			3130	624			2506	
51+00	46. 8	12.5			90	20			3220	650			2570	
51+50	43. 3	11. 4			80	20			3300	676			2624	
52+00	41. 0	3. 0			80	10			3380	689			2691	
52+50	40.3	14.8			80	20			3460	715			2745 2799	
53+00 53+50	45. 8 53. 9	11. 5 0. 3			80 90	20 10			3540 3630	741 754			2876	
54+00	53. 0	0. 7			100	0			3730	754 754			2976	
54+50	42. 3	13. 3			90	10			3820	767			3053	
55+00	42. 7	6. 7			80	20			3900	793			3107	
55+50	41. 7	10. 6			80	20			3980	819			3161	
56+00	46. 6	9. 9			80	20			4060	845			3215	
56+50	50. 2	0.8			90	10			4150	858			3292	
57+00	43. 4	3. 9			90	0			4240	858			3382	
57+50	37. 3	6. 5			70	10			4310	871			3439	
58+00	31.0	10. 2			60 50	20 20			4370 4420	897			3473 3497	
58+50 59+00	26. 7 21. 6	7. 3 7. 7			40	20 10			4420	923 936			3497 3524	
59+50	27. 7	8. 7			50	20			4510	962			3548	
60+00	22. 1	9. 8			50	20			4560	988			3572	
60+50	21. 4	10. 7			40	20			4600	1014			3586	
61+00	32. 6	3. 4			50	10			4650	1027			3623	1
61+53	38. 8	17. 7			70	20			4720	1053			3667	
			OT *	CE 1 CURTOTAL	4700	010							2//7	WACTE
			STA	AGE 1 SUBTOTAL	4720	810	0	0					3667	WASTE
			STA	AGE 2 SUBTOTAL	4720	810	0	0					3667	WASTE
			INTE	ERSECTION WORK	1140	0	0	0					1140	WASTE
			DRI VEWAYS/	'UNDI STRI BUTED	460	0	200	0					660	WASTE
				TOTAL	11040	1620	200	0					9134	WASTE
l-								-						

¹⁾ Common Excavation is the Cut column. Item number 205.0100

9

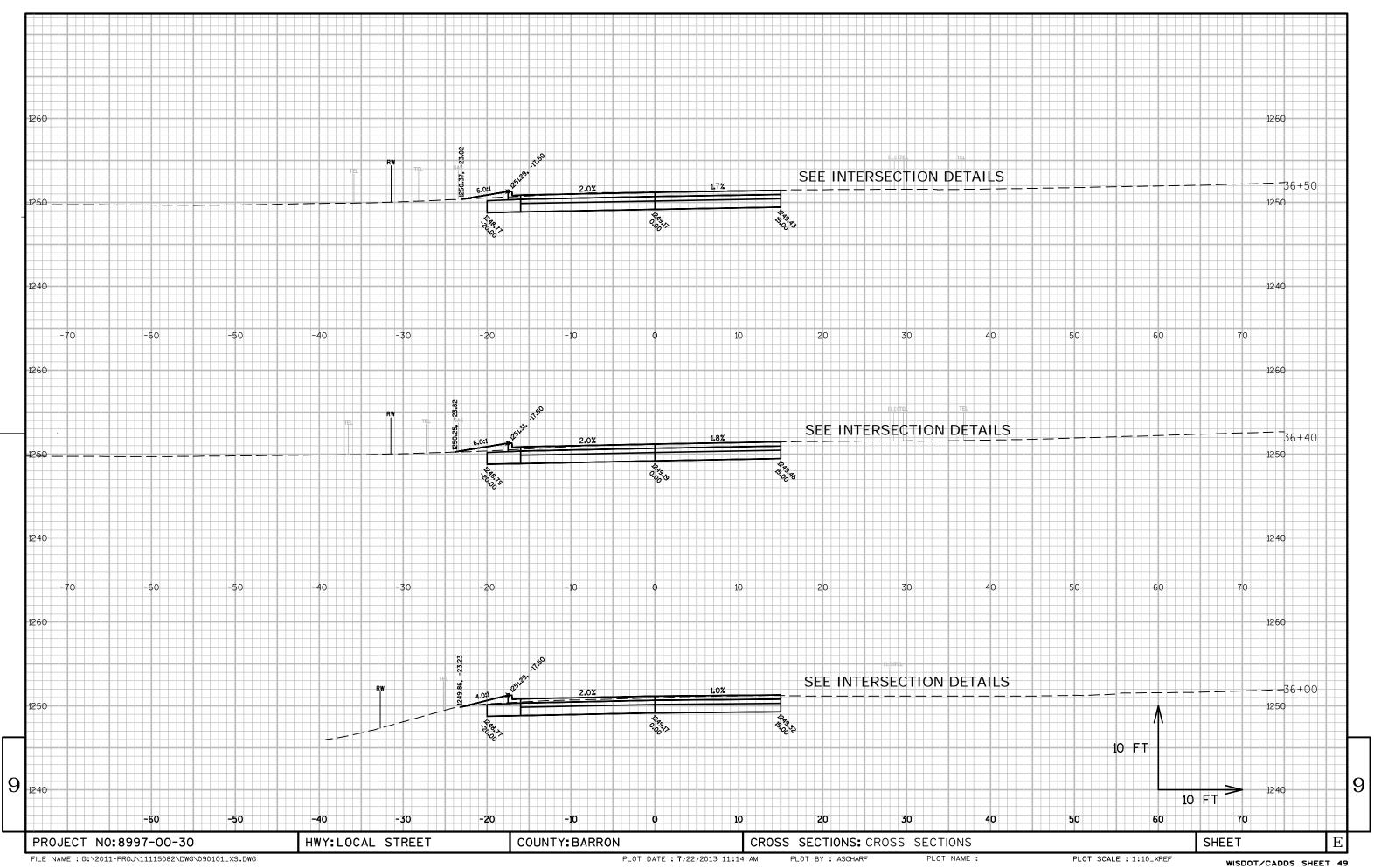
8997-00-30 HWY: LOCAL STREET COUNTY: WEST AVENUE EARTHWORK SUMMARY SHEET NO: Ε STATE PROJECT NUMBER: BARRON FILE NAME: G:\2011-proj\11115082\dwg\090101_ew.dwg PLOT DATE: Aug 08, 2013 - 03:28pm PLOT BY: Owner PLOT NAME: EARTHWORK (2) ORG. DATE: Jun 02, 2009 Originator : PLOT SCALE :

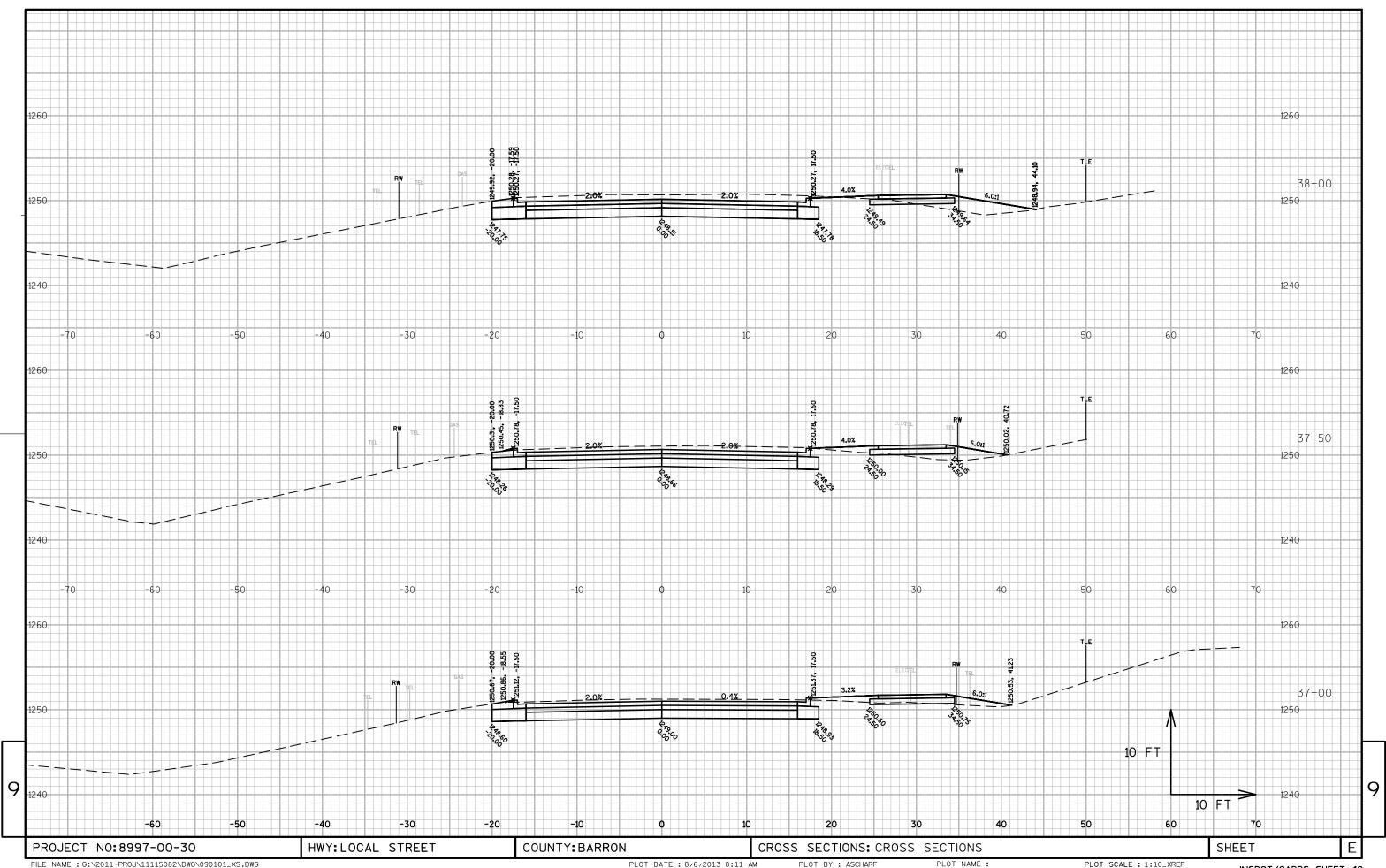
WISDOT/CADDS SHEET 42

9

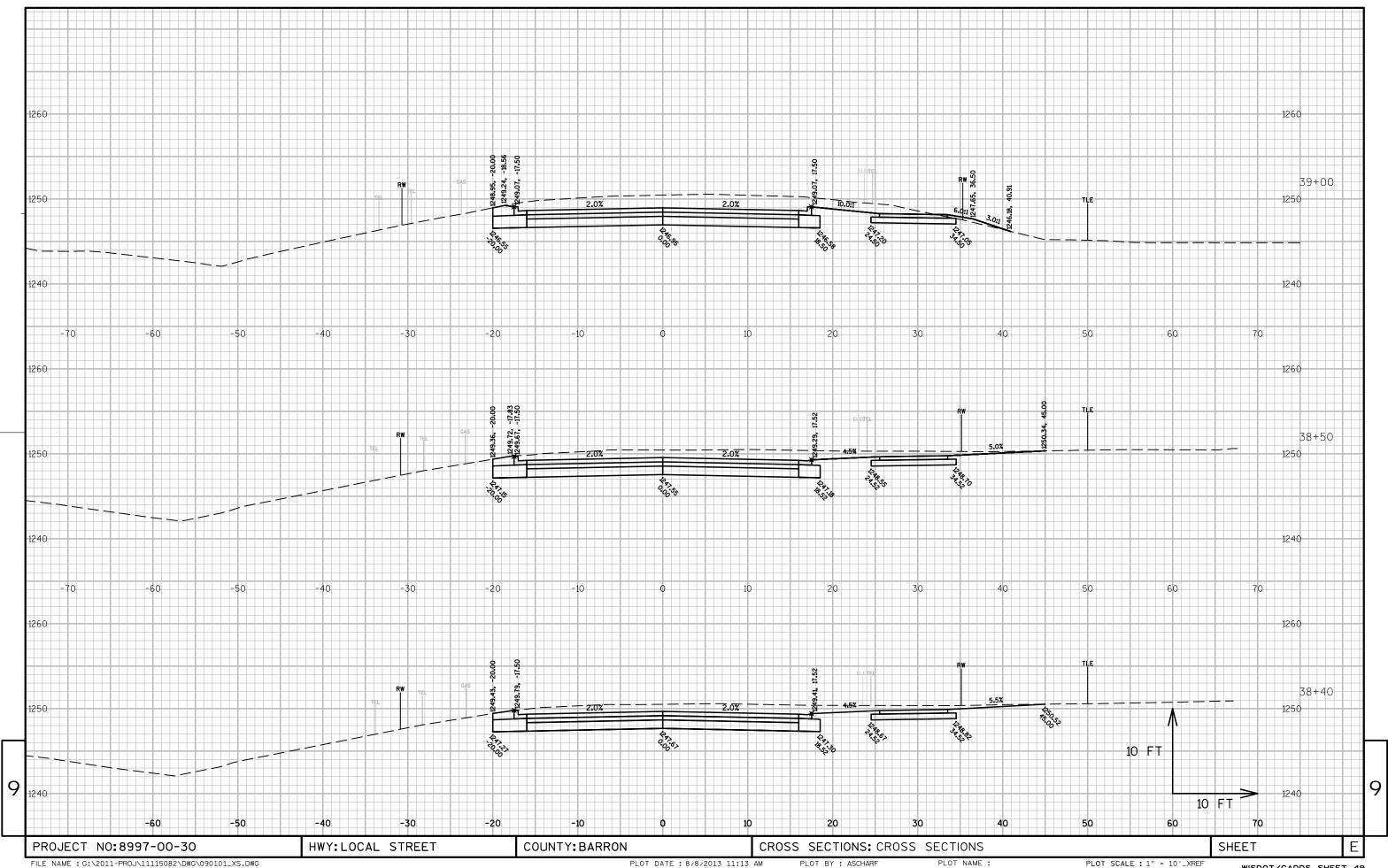
²⁾ EBS Excavation to be backfilled with Subbase. Item number 350.0104

³⁾ The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

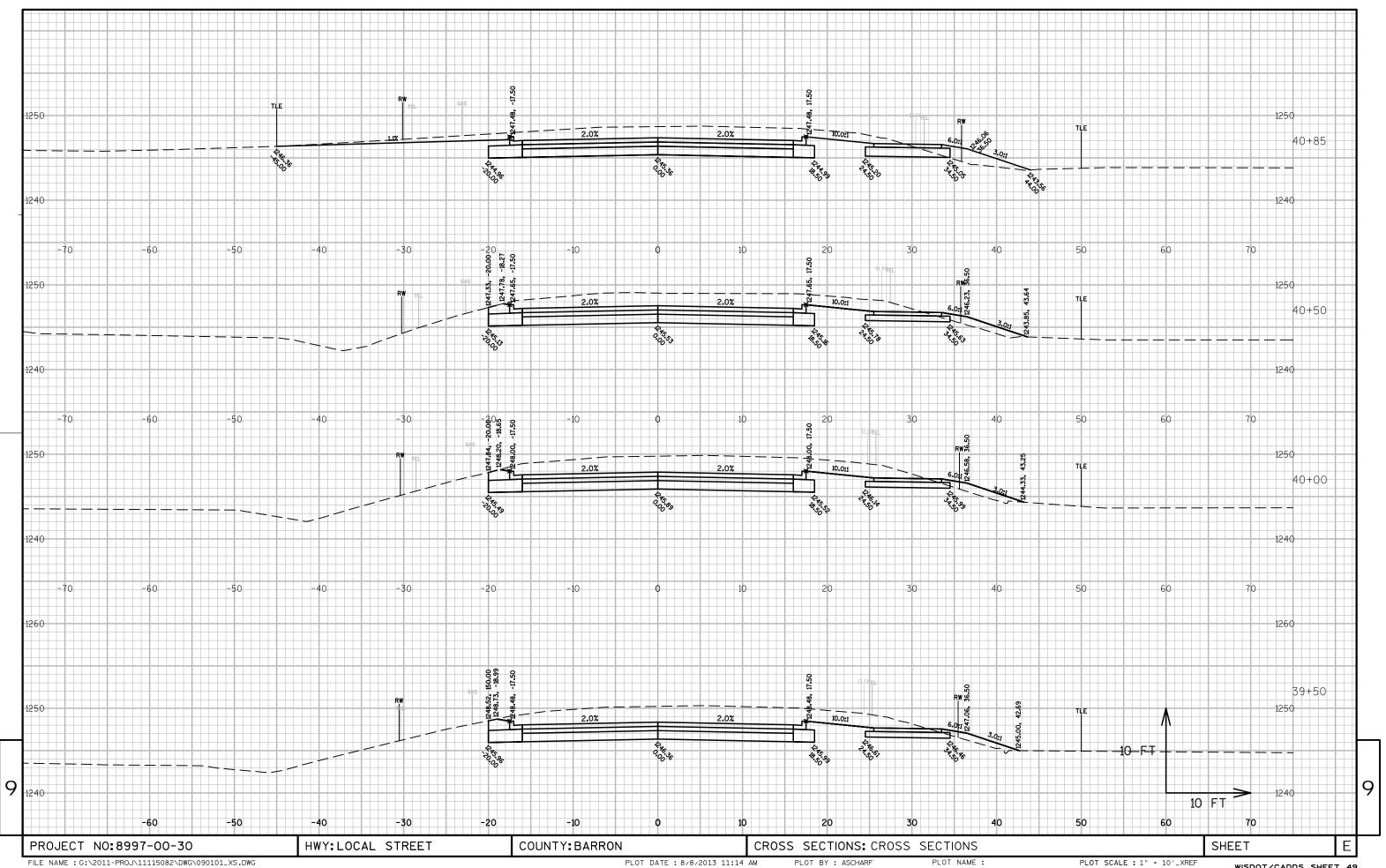




PLOT DATE: 8/6/2013 8:11 AM PLOT BY : ASCHARF PLOT SCALE : 1:10_XREF WISDOT/CADDS SHEET 49

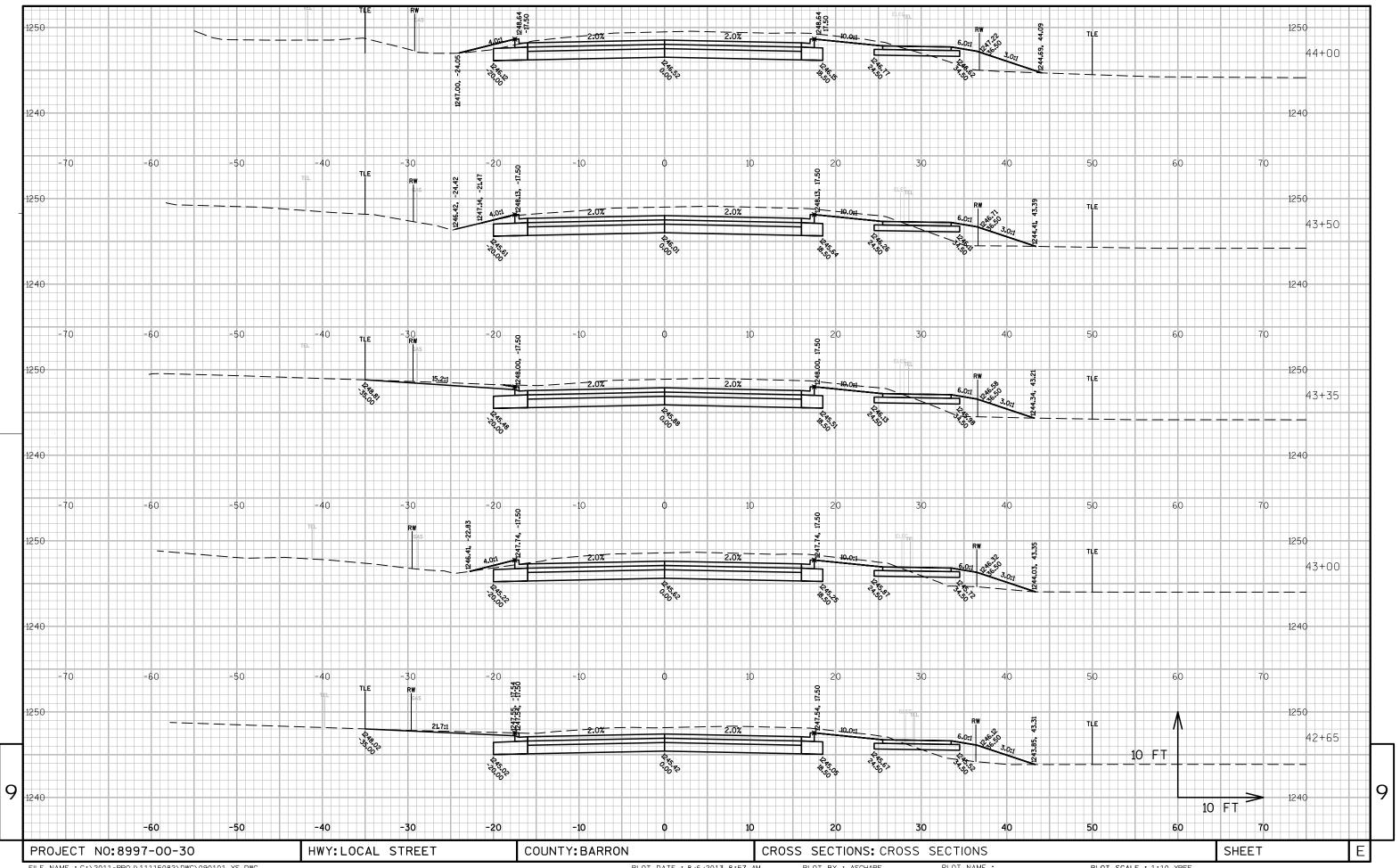


PLOT DATE: 8/8/2013 11:13 AM PLOT BY: ASCHARF PLOT NAME: PLOT SCALE: 1" = 10'_XREF WISDOT/CADDS SHEET 49

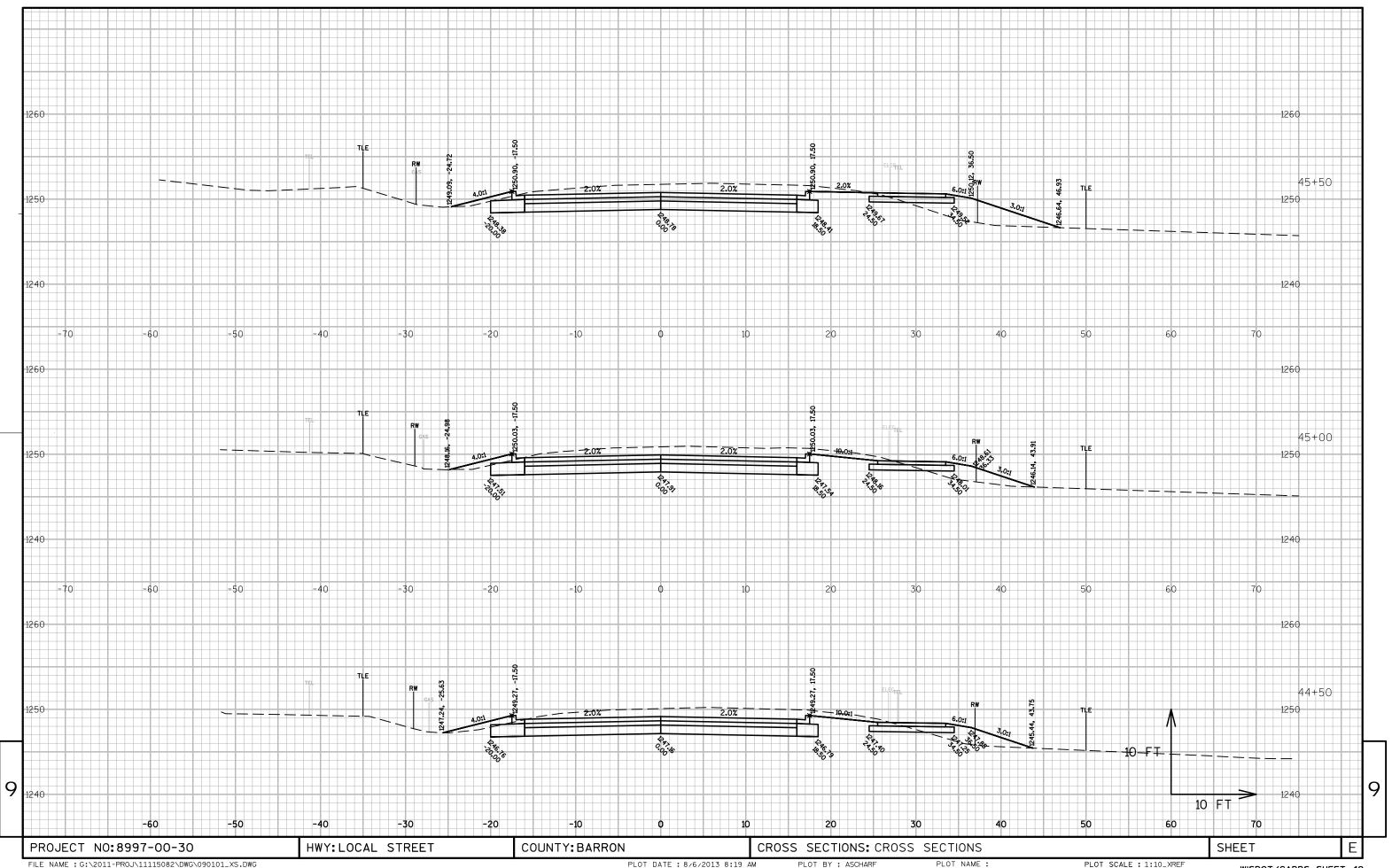




FILE NAME : G:\2011-PROJ\11115082\DWG\090101_XS.DWG PLOT BY : ASCHARF PLOT NAME : PLOT SCALE : 1" = 10'_XREF WISDOT/CADDS SHEET 49



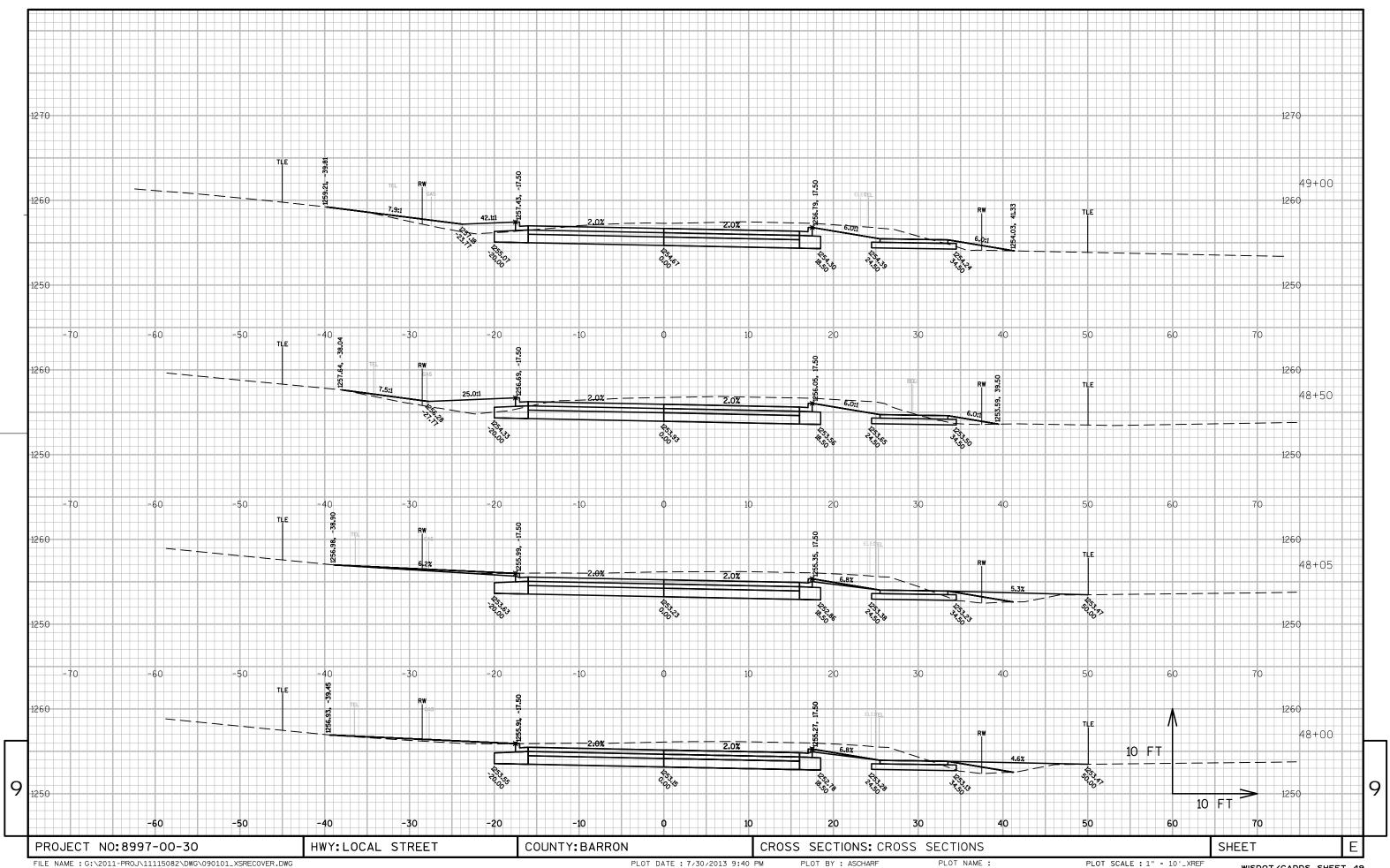
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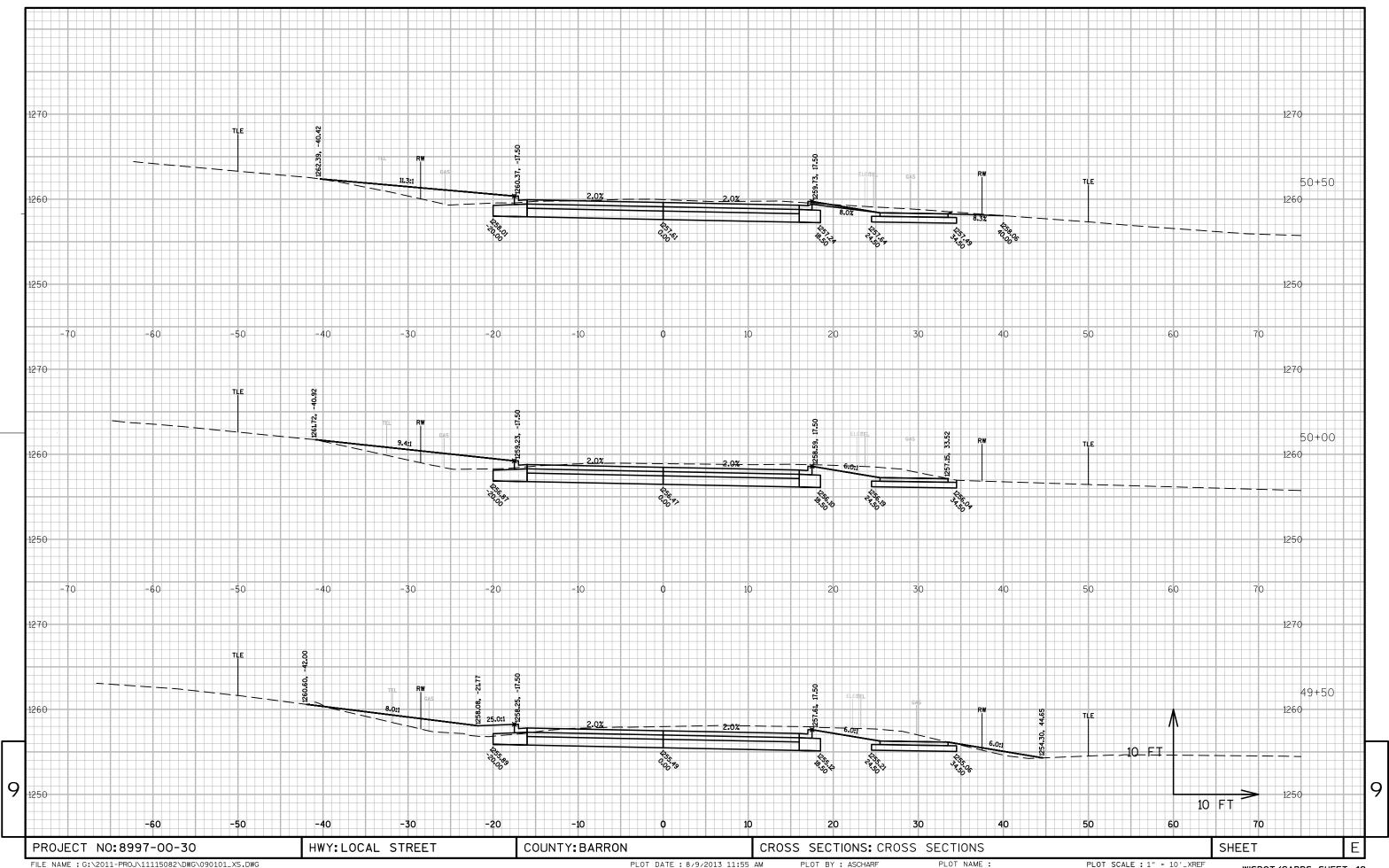


PLOT DATE: 8/6/2013 8:19 AM PLOT BY : ASCHARF PLOT SCALE : 1:10_XREF WISDOT/CADDS SHEET 49

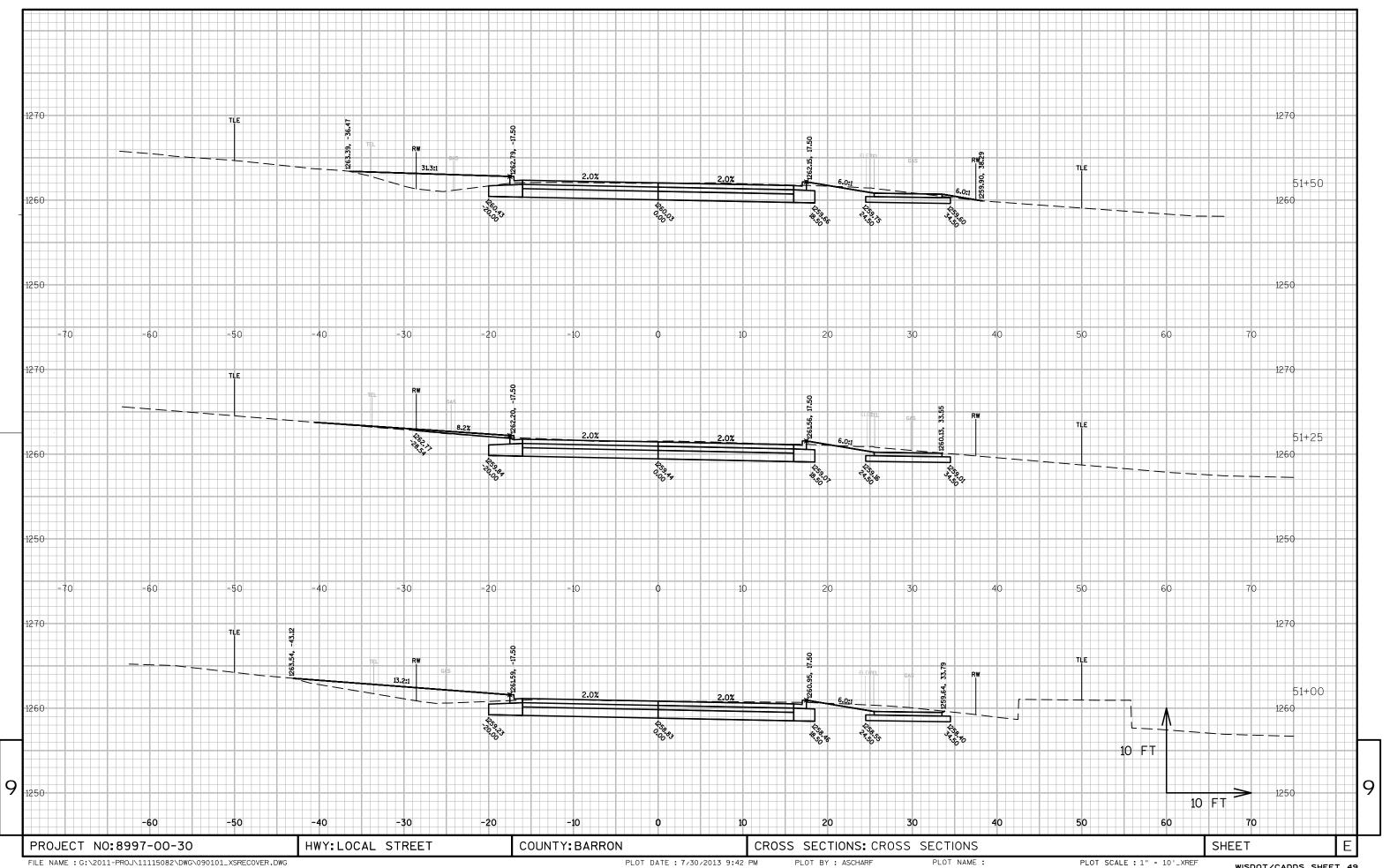


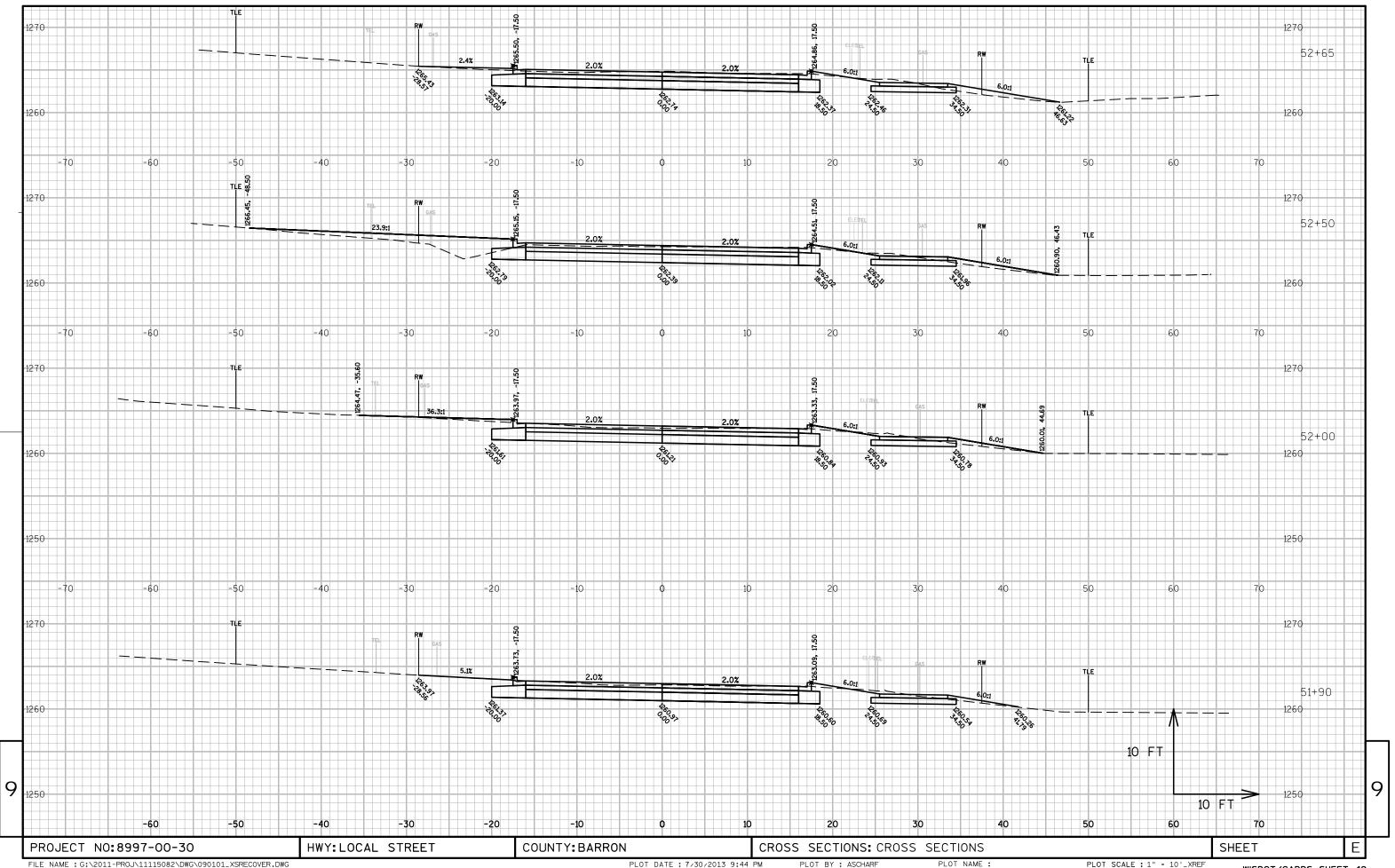
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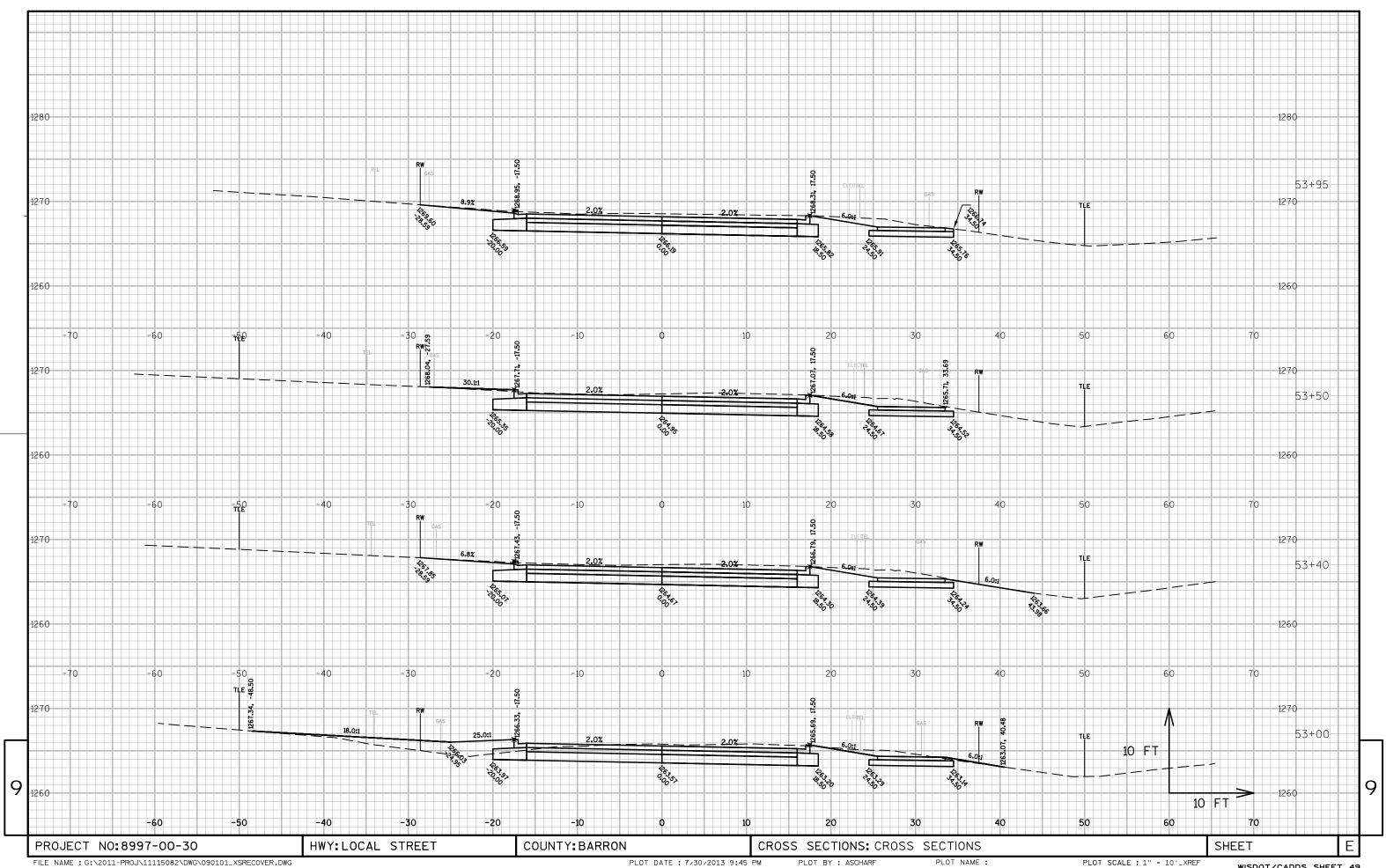


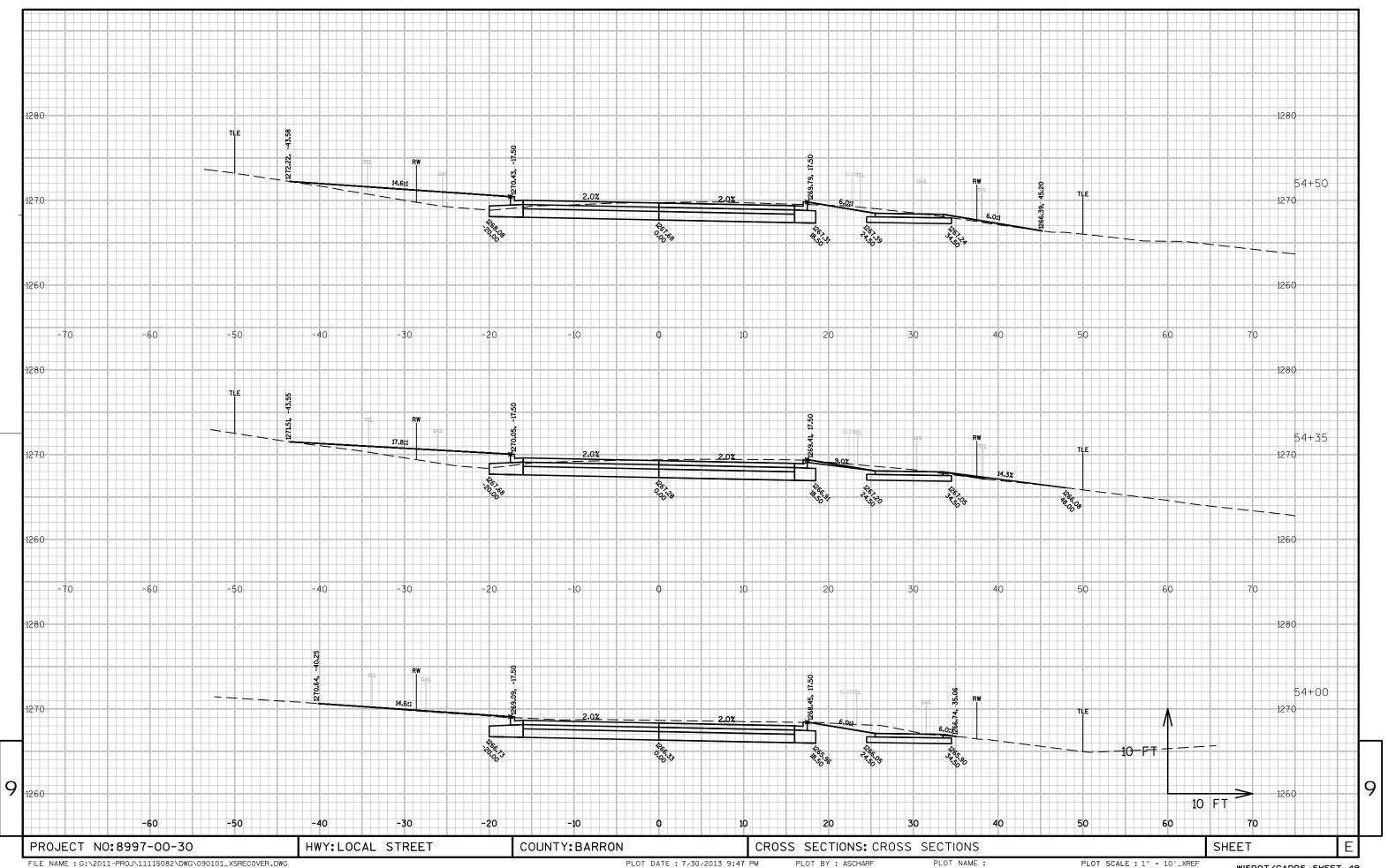
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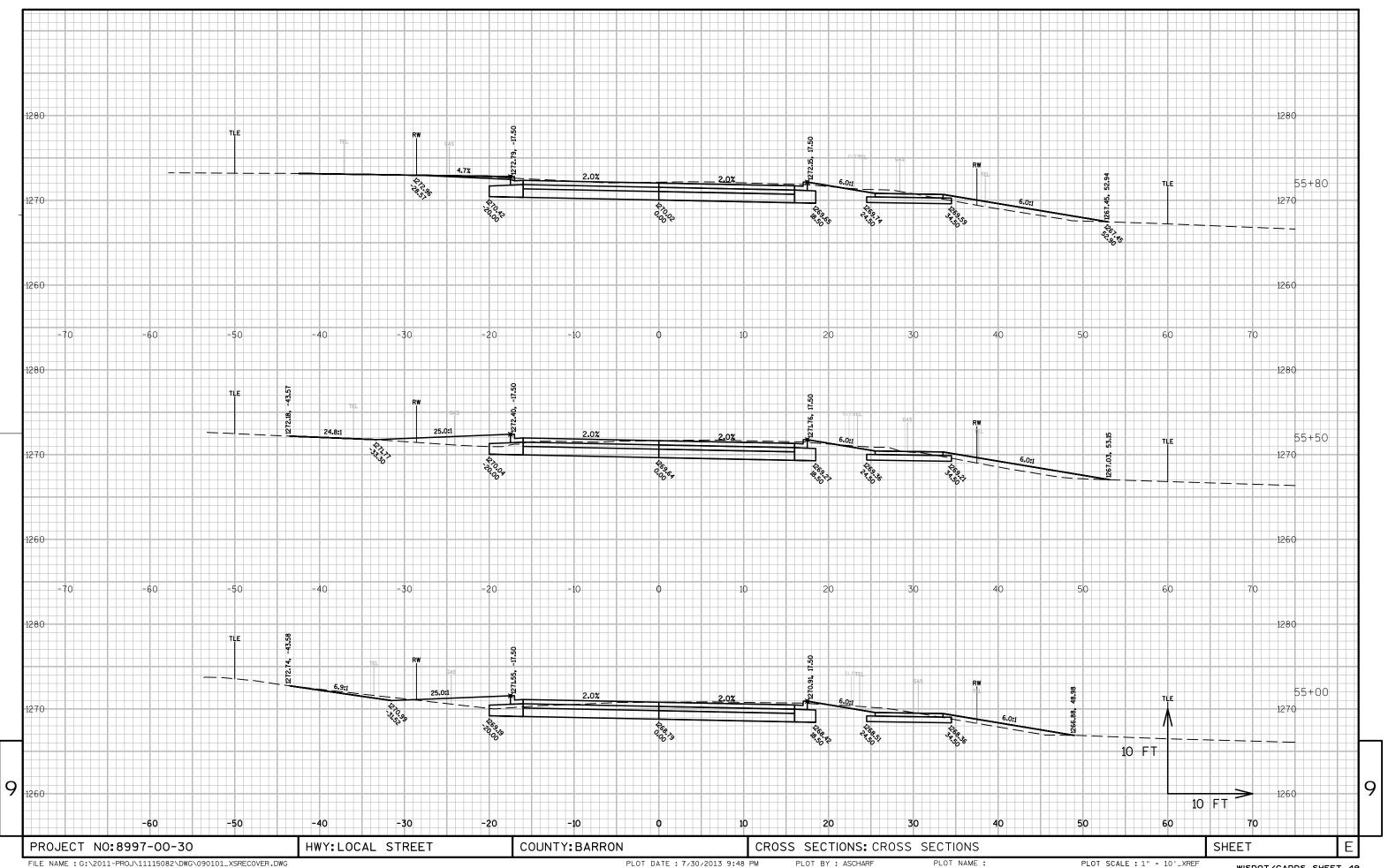


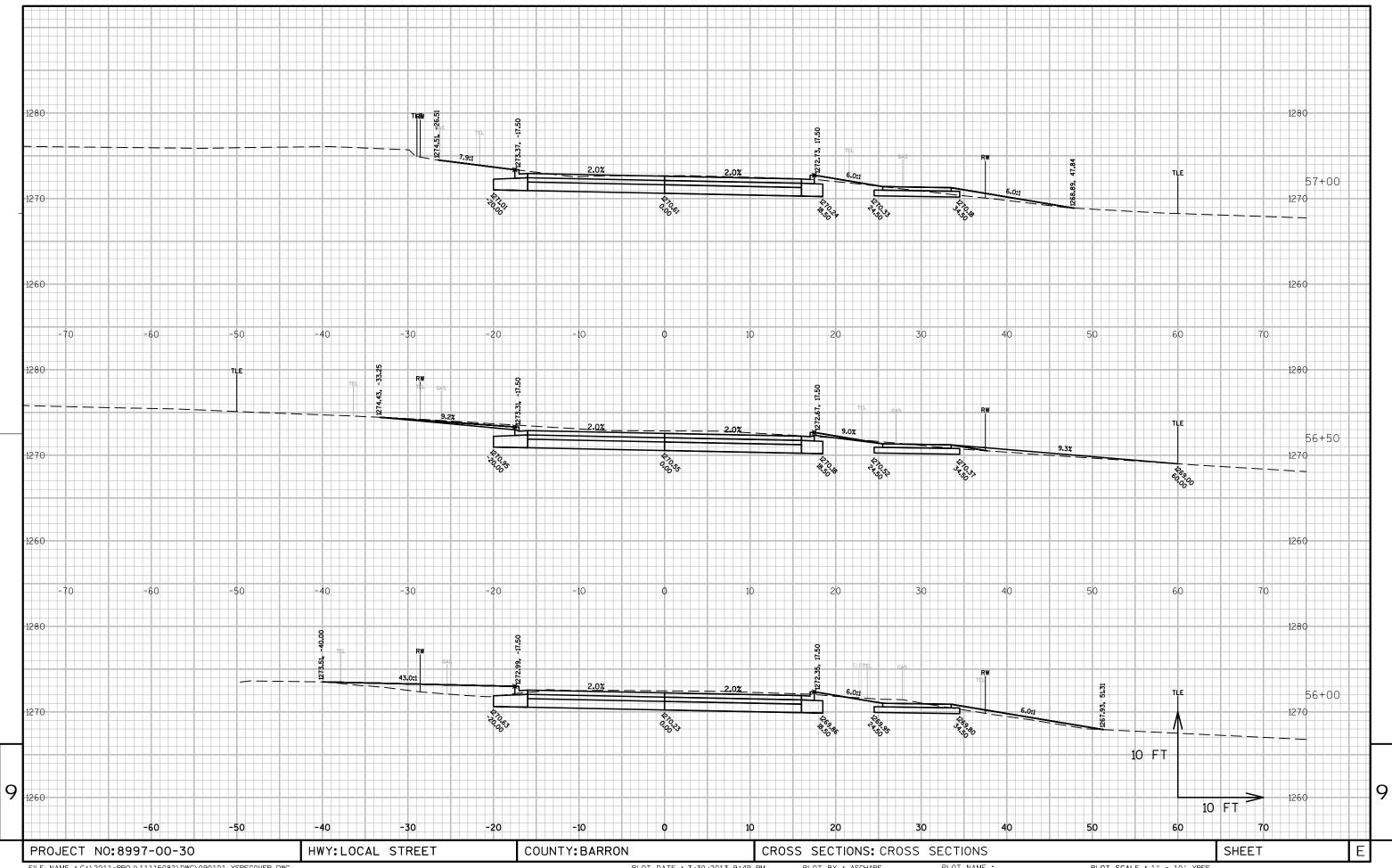
PLOT DATE: 7/30/2013 9:44 PM PLOT BY : ASCHARF PLOT NAME : PLOT SCALE : 1" = 10'_XREF WISDOT/CADDS SHEET 49



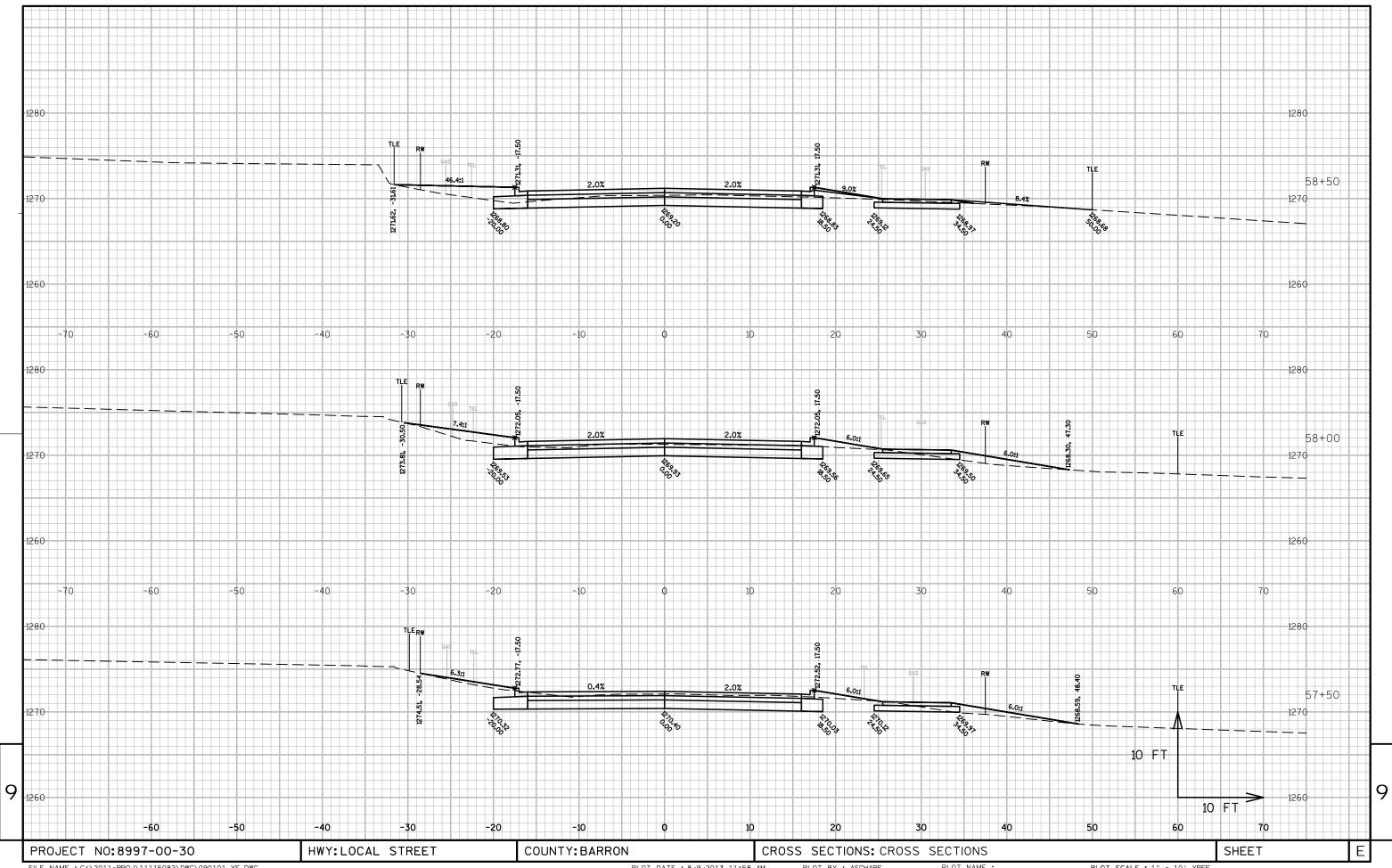


PLOT DATE: 7/30/2013 9:47 PM WISDOT/CADDS SHEET 49

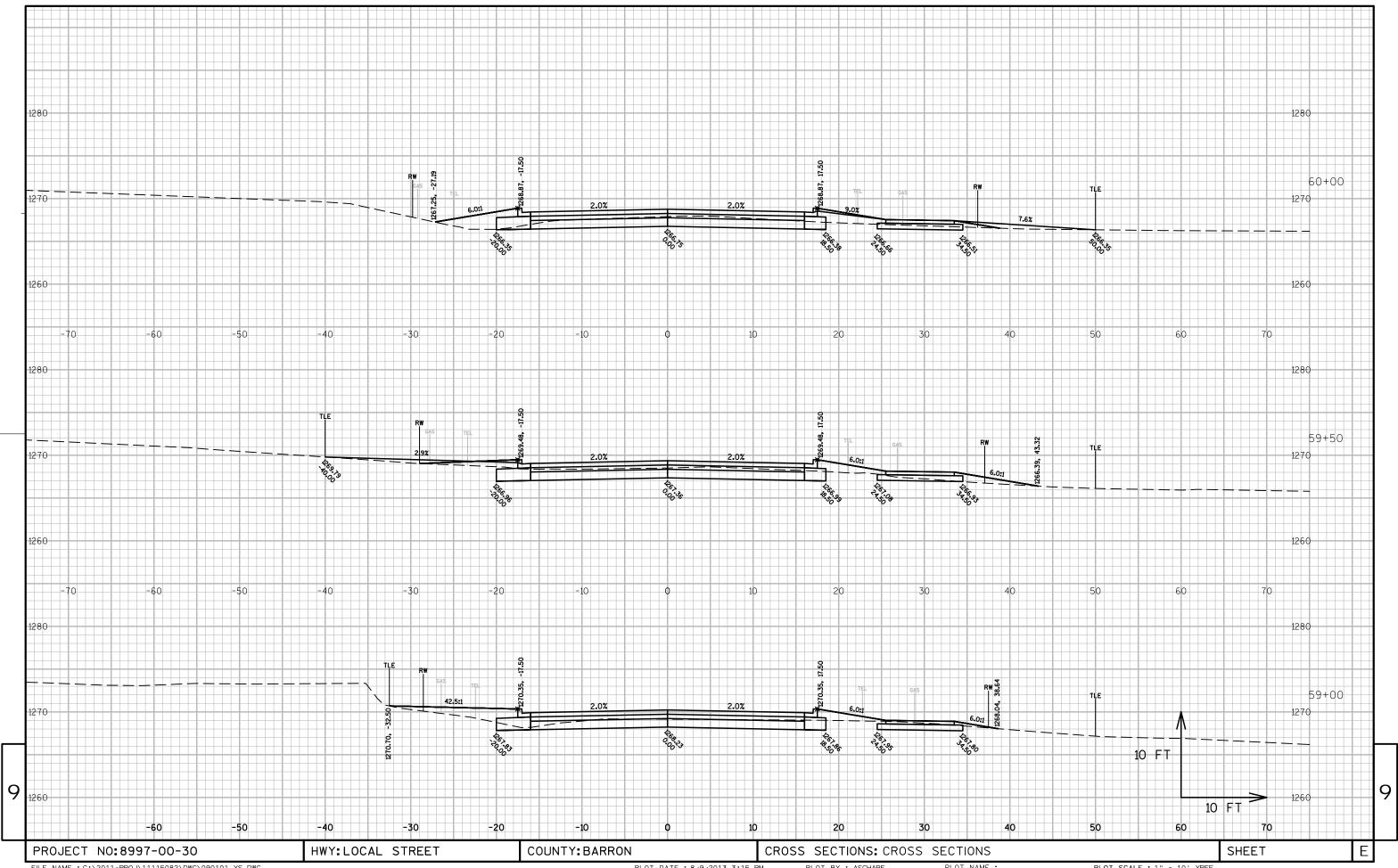




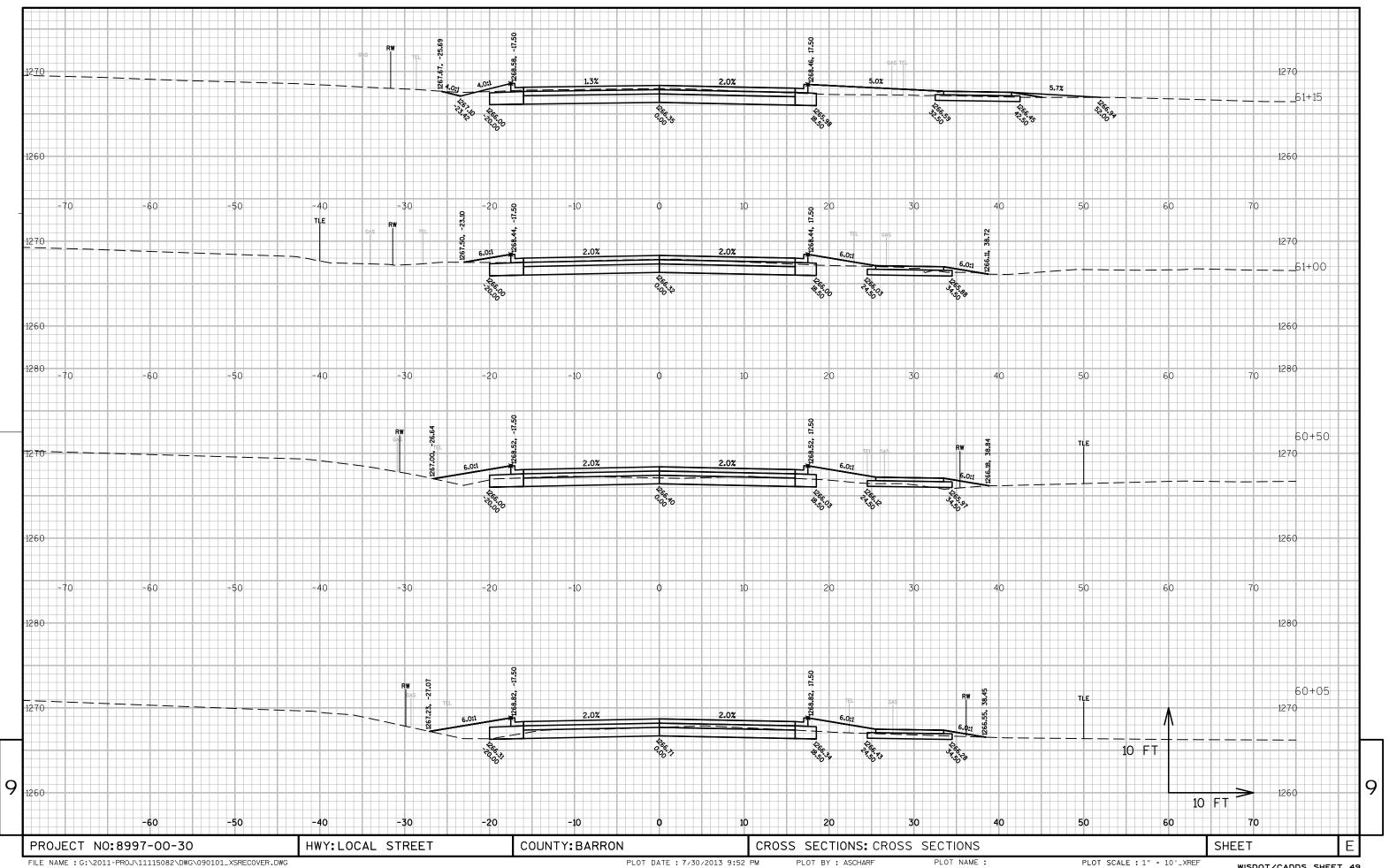
FILE NAME : G:\2011-PROJ\11115082\DWG\090101_XSRECOVER.DWG PLOT BY : ASCHARF PLOT NAME : PLOT SCALE : 1" = 10'_XREF WISDOT/CADDS SHEET 49

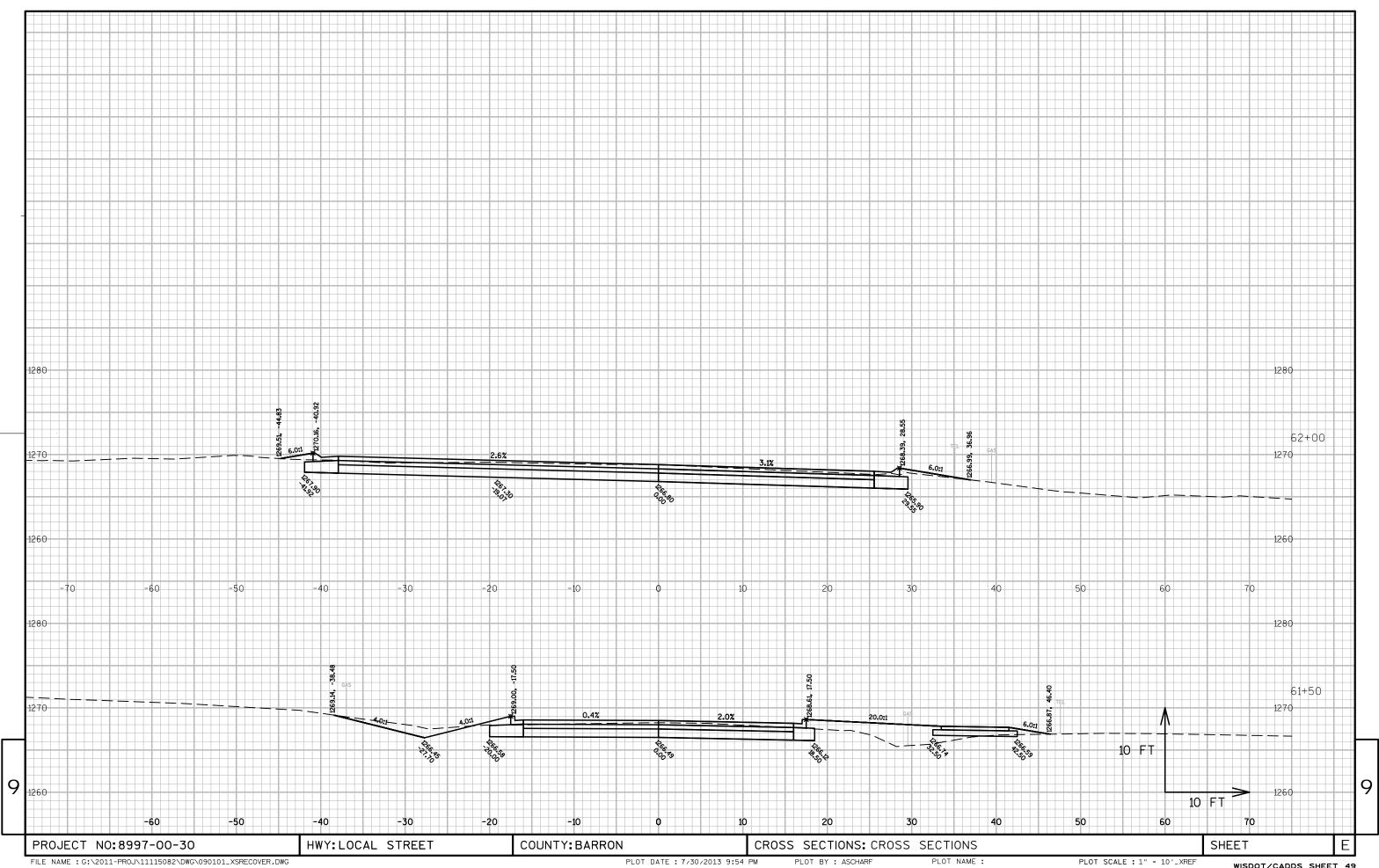


FILE NAME : G:\2011-PROJ\11115082\DWG\090101_XS.DWG PLOT BY : ASCHARF PLOT NAME : PLOT SCALE : 1" = 10'_XREF WISDOT/CADDS SHEET 49



FILE NAME : G:\2011-PROJ\11115082\DWG\090101_XS.DWG PLOT BY : ASCHARF PLOT NAME : PLOT SCALE : 1" = 10'_XREF WISDOT/CADDS SHEET 49





Notes



Wisconsin Department of Transportation

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